

# NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. The source document for this microfiche is the best copy that could be obtained prior to filming.



Congressional Information Service  
Washington, D.C.

101ST CONGRESS }  
2d Session

SENATE

{ REPORT  
101-339

COASTAL PROTECTION ACT OF 1990

---

REPORT

OF THE

COMMITTEE ON  
ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE

TO ACCOMPANY

S. 1178



JUNE 27 (legislative day, JUNE 11), 1990.—Ordered to be printed

---

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1990

30-731

5323-5

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

QUENTIN N. BURDICK, North Dakota,  
*Chairman*

DANIEL PATRICK MOYNIHAN, New York

GEORGE J. MITCHELL, Maine

MAX BAUCUS, Montana

FRANK R. LAUTENBERG, New Jersey

HARRY REID, Nevada

BOB GRAHAM, Florida

JOSEPH I. LIEBERMAN, Connecticut

HOWARD M. METZENBAUM, Ohio

JOHN H. CHAFEE, Rhode Island

ALAN K. SIMPSON, Wyoming

STEVE SYMMS, Idaho

DAVE DURENBERGER, Minnesota

JOHN W. WARNER, Virginia

JAMES M. JEFFORDS, Vermont

GORDON J. HUMPHREY, New Hampshire

DAVID M. STRAUSS, *Staff Director*

ROBERT F. HURLEY, *Minority Staff Director*

# CONTENTS

|                                                                              |      |
|------------------------------------------------------------------------------|------|
| General statement:                                                           | Page |
| A. Value of the coastal resource .....                                       | 1    |
| B. Seriousness of coastal pollution problems.....                            | 2    |
| C. Marine research and monitoring needs.....                                 | 3    |
| D. Sources of coastal pollution.....                                         | 4    |
| E. Sediment contamination .....                                              | 6    |
| F. Protecting the Great Lakes .....                                          | 7    |
| G. Special areas protection:                                                 |      |
| Long Island Sound.....                                                       | 8    |
| Lake Champlain.....                                                          | 9    |
| Onondaga Lake .....                                                          | 9    |
| Description of the reported bill:                                            |      |
| A. Title I—Marine Research and Monitoring Programs .....                     | 10   |
| B. Title II—Coastal Water Quality Protection Programs .....                  | 11   |
| C. Title III—Marine Sediment Contamination .....                             | 12   |
| D. Title IV—Great Lakes Programs .....                                       | 12   |
| E. Title V—Special Areas Protection .....                                    | 12   |
| Section-by-section description:                                              |      |
| Title I—Marine Research and Monitoring Programs:                             |      |
| Section:                                                                     |      |
| 101—Regional Marine Research Programs.....                                   | 13   |
| 102—National Marine Monitoring Program .....                                 | 14   |
| Title II—Water Quality Protection Programs:                                  |      |
| Section:                                                                     |      |
| 201—Coastal Environment Toxics Release Assessment .....                      | 15   |
| 202—National Estuary Program.....                                            | 15   |
| 203—Priority Marine Waters .....                                             | 15   |
| 204—Pretreatment Requirements .....                                          | 15   |
| 205—Nonpoint Source Pollution Control .....                                  | 15   |
| 206—Marine Sanitation Devices.....                                           | 16   |
| 207—Coastal Combined Sewer Overflows .....                                   | 16   |
| 208—Marine Water Quality and Sediment Quality Criteria and<br>Standards..... | 16   |
| 209—Ocean Discharge Criteria .....                                           | 17   |
| 210—Chesapeake Bay.....                                                      | 17   |
| 211—Definitions .....                                                        | 17   |
| Title III—Marine Sediment Contamination:                                     |      |
| Section:                                                                     |      |
| 301—Sediment Contamination Survey .....                                      | 17   |
| 302—Marine Sediment Contamination.....                                       | 17   |
| 303—State Ocean Dumping Requirements .....                                   | 17   |
| 304—Site Designation .....                                                   | 17   |
| 305—Permit Conditions .....                                                  | 17   |
| 306—Ocean Dumping Penalties.....                                             | 18   |
| 307—Mud Dump Site .....                                                      | 18   |
| Title IV:                                                                    |      |
| Section:                                                                     |      |
| 401—Short Title .....                                                        | 18   |
| 402—Great Lakes Action Schedules.....                                        | 18   |
| 403—Contaminated Sediments.....                                              | 18   |
| 404—Definitions .....                                                        | 19   |
| 405—Great Lakes Confined Disposal Facilities.....                            | 19   |
| 406—Authorization.....                                                       | 19   |



## Section-by-section description—Continued

## Title V:

## Part A—Long Island Sound:

## Section:

|                                                               |    |
|---------------------------------------------------------------|----|
| 501—Short Title.....                                          | 19 |
| 502—Amendment to the Federal Water Pollution Control Act..... | 19 |
| 503—Relationship to Other Laws.....                           | 19 |

## Part B—Lake Champlain:

## Section:

|                                                |    |
|------------------------------------------------|----|
| 510—Short Title.....                           | 19 |
| 511—Demonstration Program .....                | 20 |
| 512—Lake Champlain Management Conference ..... | 20 |
| 513—Federal Program Coordination .....         | 20 |

## Part C—Onondaga Lake:

## Section:

|                                                               |    |
|---------------------------------------------------------------|----|
| 520—Short Title.....                                          | 20 |
| 521—Amendment to the Federal Water Pollution Control Act..... | 20 |

## Title VI—Other Provisions:

## Section:

|                                                     |    |
|-----------------------------------------------------|----|
| 601—Identification of Unregulated Contaminants..... | 20 |
| 602—Federal Agency Responsibilities.....            | 20 |
| 603—Reports and Studies.....                        | 21 |

|                              |    |
|------------------------------|----|
| Hearings .....               | 21 |
| Rollcall votes.....          | 22 |
| Regulatory impact .....      | 22 |
| Cost of legislation.....     | 22 |
| Changes in existing law..... | 26 |

## COASTAL PROTECTION ACT OF 1990

JUNE 27 (legislative day, JUNE 11), 1990.—Ordered to be printed

Mr. BURDICK, from the Committee on Environment and Public Works, submitted the following

## R E P O R T

[To accompany S. 1178]

The Committee on Environment and Public Works, to which was referred the bill (S. 1178) to improve and expand programs for research and protection of marine waters and the Great Lakes, having considered the same, reports favorably with an amendment and recommends that the bill as amended do pass.

## GENERAL STATEMENT

There is now compelling evidence that coastal waters and the Great Lakes face a wide range of pollution problems and that these waters will become seriously degraded without prompt action to control pollution. The reported bill responds to this problem by providing a comprehensive approach and protection of coastal waters, including the waters of the Great Lakes.

(A) *Value of the coastal resource.*—Marine waters, estuaries, and the Great Lakes are a national resource of outstanding importance. These waters serve vital ecological functions, providing habitat to commercial and endangered species, food chain support, ground water recharge, and peak flood protection.

Commercial fish landings by U.S. fishermen totalled 10.7 billion pounds in 1989 and were valued at over \$3.5 billion. The combined value of marine commercial and recreational fishing industries is over \$12 billion annually. While over 70 percent of the commercial fish and shellfish nationwide depend on estuarine and near-coastal waters, landings of estuarine dependent species have declined over the past 20 years.

Coastal waters also are a valuable recreational resource. Tourism is a major source of income in many coastal communities, and rec-

reational activities are partially dependent on the quality of the coastal environment. Government expenditures for marine related recreation are over \$5 billion a year. A recent study in Florida indicated that 13 million adults used the beaches in 1984, generating sales of \$4.6 billion, 180,000 jobs, and a payroll of about \$1.1 billion.

(B) *Seriousness of coastal pollution problems.*—There is growing public awareness and concern for environmental problems in coastal waters. Beaches were closed throughout the Northeast in the summer of 1987 after the discovery of medical wastes and other pollutants. There is a large "dead zone" in the Gulf of Mexico. Boston Harbor and other estuaries face significant pollution problems. Sediments in many coastal bays are contaminated with toxic materials, including heavy metals, pesticides, and toxics.

Recent reports by the Office of Technology Assessment (OTA), the Environmental Protection Agency (EPA), and the National Oceanic and Atmospheric Administration (NOAA) provide clear evidence of the range of environmental problems facing coastal waters.

The OTA has issued a major report titled "Wastes in the Marine Environment" which assesses and summarizes coastal pollution problems and existing pollution control programs. The report states—

These programs represent reasonable approaches to address the problem of pollution in the marine environment. . . . However . . . only partial implementation has been achieved to date . . . and the prospect of ever achieving full implementation is unlikely: the Nation's past commitment of resources has been insufficient to accomplish all the essential activities of existing programs . . . and even these resources are now declining . . ."

Moreover, even if total compliance with today's regulations is achieved, existing programs will not be sufficient to . . . maintain or improve the health of all estuaries and coastal waters. In the absence of additional measures to protect our marine waters, the next few decades will witness new or continued degradation in many estuaries and coastal waters around the country.

A representative of NOAA testified before the Environment and Public Works Committee in July of 1989 saying—

I want to emphasize that the extent of the coastal pollution problems is truly *national* and not limited to only a few specific coastal or estuarine areas. Solutions to the problem will require an approach that is national in scope and scale.

The Council on Environment Quality recently published a major assessment of environmental progress over the past 20 years. The report, entitled "Environmental Quality: Twentieth Annual Report," cited significant improvements in the quality of several environmental media, but concluded that two major problem areas were the loss of coastal wetlands and declines in marine environmental quality. The report states—

If, on the other hand, the viability of wetlands and estuarine ecosystems is used to measure environmental progress, the nation's track record over the past two decades is less impressive. . . . Moreover, the quality of some coastal waters and estuaries apparently has declined over the last two decades. Between 1971 and 1985, shellfish harvest restrictions resulting from environmental contamination increased 14 percent to 7.5 million acres; by 1985 approximately 40 percent of the nation's shellfish beds were closed for some or all of the season. Closures were caused by environmental pollution ranging from inadequate or overwhelmed sewage treatment plants to urban water runoff to contamination from feedlots and other agricultural operations. More recently, coastal beach closings and oil spills have focused public attention on coastal water quality.

Basic demographic trends are likely to support continued high levels of public interest and concern for the quality of coastal waters. NOAA estimates that about half of the U.S. population—about 110 million people—now live in coastal areas. By the year 2010, coastal population is expected to increase to 127 million people, an increase of 60 percent over the 1960 population of 80 million.

Particularly large increases in population are expected in some States, such as Florida and California. In Florida, population is expected to increase from 5 million in 1960 to 16 million by 2010—an increase of 220 percent.

(C) *Marine research and monitoring needs.*—A number of recent studies include strong recommendations for expanding and strengthening marine research and monitoring programs.

The OTA report suggests a range of actions to reverse the decline in coastal and marine water quality, including expanding and strengthening research on the marine environment. The report states—

Monitoring, research, and enforcement are currently inadequate, and funding levels for these activities are being reduced in some instances.

There is also growing evidence that existing programs assessing the overall quality of the marine environment are seriously flawed. A March 1990 report by the National Research Council on the issue of marine monitoring concluded—

The present array of compliance monitoring programs, regional monitoring programs, and the National Oceanic and Atmospheric Administration National Status and Trends Program is inadequate to establish patterns and trends in the quality of the nation's coastal oceans and estuaries or to determine the effectiveness of environmental policies and programs.

The report calls for strengthening the role of monitoring in marine environmental management, conducting monitoring of marine status and trends, improving monitoring program design, and making information products more useful.

The general lack of information about the marine environment can be expected to remain a serious problem. The National Ocean Pollution Planning Board reports that Federal funding for marine pollution research and monitoring by the full range of Federal agencies declined from \$145.9 million in 1982 to \$101.7 million in 1988.

In addition to the concern about expanding and better directing research and monitoring efforts, there is growing recognition of the need to focus research and monitoring on the various multi-state, regional marine ecosystems around the country.

The report by the National Research Council on marine monitoring states—

To address public concerns and address the threat of the cumulative impacts of human activities on the marine environment more effectively, regional status and trends monitoring is needed.

The OTA report also supports a regional focus.

More research needs to be conducted on changes over relatively large scales—for long periods of time and for entire ecological communities.

At Environment and Public Works Committee hearings on coastal research issues conducted in 1987, witnesses addressed the need for a regional focus on research and monitoring. Dr. Sarah Taylor, representing the Coastal States Organization, stated—

In light of the fact that many coastal degradation issues are regional, regional solutions will be required.

Mr. Ken Coons of the New England Fisheries Development Foundation, testifying at the same hearing, stated—

A coordinated regional approach to focus existing research capabilities on estuarine and marine pollution problems is clearly needed.

(D) *Sources of coastal pollution.*—Pollutant discharges to coastal waters are significant and will increase as population continues to concentrate along the coast. Major sources of coastal pollution include point source discharges from industrial facilities, discharges of sewage from publicly owned treatment works, overflows from combined storm and sanitary sewers, and nonpoint pollution from urban areas, construction sites, and agricultural lands.

While only 10 percent of the Nation's 66,000 point source discharges are located in coastal areas, they contribute over one third of the total annual wastewater discharged throughout the country.

Some 1,300 major industrial facilities discharge effluents directly to coastal waters. These discharges pose a significant pollution problem. The OTA Report concluded that—

Large quantities of toxic pollutants are entering marine environments, particularly estuaries and coastal waters. Legal discharges of industrial effluents . . . often contain substantial amounts of toxic pollutants; indeed, in the aggregate, industrial discharges represent the largest source of toxic pollutants entering the marine environment.



The OTA Report further noted that there is—

a considerable degree of acceptance of the routine (but environmentally significant) discharge of effluents into estuaries and coastal waters, especially when contrasted with the public and governmental attention focused on the dumping of industrial and municipal wastes in the open ocean.

Over one quarter of the 2,900 major wastewater treatment plants (i.e. plants discharging more than one million gallons per day) in the United States are located in coastal counties. These plants discharge some 2.3 trillion gallons of sewage to coastal waters each year. In addition, some 3.6 trillion gallons of sewage is discharged each year to coastal rivers which eventually reach the sea.

While the bulk of the pollutant loadings in these discharges are conventional pollutants (e.g. biological oxygen demand (BOD), solids, nutrients, and phosphorus) the discharges contain a significant amount of toxic contaminants from industrial and other sources.

Discharges from combined storm and sanitary sewers are an especially serious source of pollution to coastal waters. These overflows, which occur in over 1,000 coastal cities, are responsible for beach closings each year and are a significant source of floatable and plastic pollution.

In addition, combined sewer overflows are responsible for closing of shellfish beds in many areas. NOAA reports that combined sewer overflows contributed to the closing of 54 percent of the closed shellfish beds in New England. Combined sewer overflows contributed to the closing of 62 percent of the closed shellfishing beds in Long Island Sound, 58 percent in Narragansett Bay, 97 percent in the Hudson/Raritan estuary, and 46 percent in Massachusetts Bay.

The discharge of large volumes can affect human health as well as the environment. The OTA Report concluded—

These findings suggest that the routine discharge of sewage effluent and the dumping of sewage sludge into estuaries, coastal waters, and the open ocean may be introducing large numbers of viable microorganisms, including pathogens, and that their destinies in both water and sediment may be increasing. Further study of the public health consequences of these practices is needed, particularly insight of the increasing incidence of shellfish and water borne disease.

While the recreational and other values of the coast attract added population growth, this growth can contribute to the contamination and related environmental problems of coastal waters. Development and urbanization in coastal areas causes water pollution problems through runoff from city streets, construction sites, and agricultural lands. These "nonpoint" sources of pollution are a major cause of coastal water quality problems.

The EPA confirmed the significant role of development in coastal pollution in testimony before the Environment and Public Works Committee in 1989, when a representative of the Agency stated—

The challenge before us is to protect and restore the environmental quality of our near coastal waters, living resources, and their habitats. Solutions to these problems become increasingly complex as their major causes are land based, and primarily due to the population growth and development occurring in our coastal zone.

NOAA estimates that some 330 thousand tons of phosphorus and 1.8 million tons of nitrogen are discharged annually to the nation's estuaries. Some 12 percent of the nitrogen and 40 percent of the phosphorus is attributable to wastewater treatment plants, but the majority is attributable to nonpoint sources of pollution. In review of this data, a NOAA representative commented—

Increasing evidence of reduced fish catches, loss of habitats, and degradation of water and sediment quality caused by nutrient over-enrichment indicates that nutrient discharges must be limited.

(E) *Sediment contamination.*—There is growing evidence that sediments underlying marine and Great Lakes waters contain contaminants at levels which pose a threat to the quality of the aquatic environment and to human health.

The National Research Council issued a report in October 1989 which concluded—

Contamination of marine sediment poses a potential threat to marine resources and human health (through seafood consumption) at numerous sites around the country . . . improving the Nation's capability to assess, manage, and remediate these contaminated sediments is critical to the health of the marine environment.

The NOAA has published the results of a national program to monitor toxic chemicals at 50 coastal and estuarine sites from Maine to Alaska. The report states—

A number of sites revealed relatively high levels of toxic contaminants in both bottom sediments and bottom dwelling fish. For example, sediment concentrations of toxic trace metals, aromatic hydrocarbons, DDT's, PCBs, and sewage derived material from northeastern Atlantic coast cites in Boston Harbor, Salem Harbor, and Raritan Bay are among the highest values measured nationally.

Sediment contamination has resulted in environmental problems in virtually every region of the country.

- There are elevated levels of contaminants in the sediments of 41 of the 42 Areas of Concern in the Great Lakes. Studies of sediments in the Detroit River, for example, have found high concentrations of polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), DDT, mercury, lead, arsenic, cadmium, and several other pesticides and metals.
- Parts of New Bedford Harbor, the highest value fishing port in the United States, are underlain with sediments containing PCB concentrations that range as high as 100,000 parts per million, and the accumulation of PCBs in many marine species has been documented.

- The sediments of Choctawatchee Bay on the Gulf Coast of Florida contain significant levels of DDT, and sediment levels of chlorinated pesticides are in some cases twice as high as levels found in any of the other areas studied.
- Prior to imposition of control measures in 1970, large quantities of DDT were discharged to the Pacific Ocean through the Los Angeles County municipal sewer system; and sediments of the Palos Verdes shelf continue to exhibit extremely high levels of DDT.
- As a result of extensive contamination of sediments, and the accumulation of toxic substances in indigenous biota, the 9-square-mile area of Commencement Bay in Puget Sound was added to EPA's National Priorities List of hazardous waste sites in 1983.
- In the State of New York, the striped bass commercial fishery has been closed because of PCB contamination of sediments.

(F) *Protecting the Great Lakes.*—The Great Lakes are a unique water resource of both the United States and Canada and are often thought of as our “freshwater coasts”.

Protection of the quality of the Great Lakes has been a concern for many years. A Great Lakes Water Quality Agreement was first adopted by the United States and Canada in 1972, and revised in 1978 and 1987. The agreement, overseen by the International Joint Commission, includes an extensive set of water quality objectives for the Great Lakes, procedures for developing Remedial Action Plans for specific Areas of Concern, measures for developing Lakewide Management Plans, as well as a number of provisions dealing with research and monitoring, contaminated sediments, airborne toxic chemicals, and groundwater pollution.

The Great Lakes program of the United States are addressed in section 118 of the Clean Water Act. This section of the Act provides general authority for the EPA Great Lakes National Program Office, describes the functions of the program office, and provides for coordination of Great Lakes related research.

The “1989 Report on Great Lakes Water Quality,” issued by the International Joint Commission's Water Quality Board, indicates that there has been slow progress in addressing water quality concerns in the Great Lakes, particularly relating to control of persistent toxic chemicals and remediation of 42 designated Areas of Concern.

The Commission's 1989 Biennial Report also summarizes the concern of the general public regarding implementation of the Agreement—

Although there was occasional recognition of and expression of support for progress made in certain isolated areas or respects, there was virtual unanimity of opinion that real progress toward achievement of the Agreement's objectives is sadly, if not totally, lacking.

In 1989, the Conservation Foundation and the Institute for Research on Public Policy released a joint two-year report on the overall state of the Great Lakes, warning of ongoing pollution problems. The report traced reproductive problems, population declines and health problems affecting 16 Great Lakes species, including



bald eagles that reproduce poorly, cormorants with beak deformities, dwindling mink populations, and schools of trout that can no longer survive without assistance.

The Great Lakes Critical Programs Act (S. 1646) would amend section 118 of the Clean Water Act to require implementation of key provisions of the Great Lakes Agreement. Most of the provisions of S. 1646 have been incorporated into title IV of the reported bill.

(G) *Special areas protection.*—

LONG ISLAND SOUND

Since 1985, Long Island Sound has been recognized by the U.S. Congress as an estuary of national significance. It is a major estuary, about 113 miles long and covering 1,300 square miles. Five million people live within fifteen miles of the Sound. Fifteen million people, or about 7 percent of the population of the United States, live within its drainage basin.

The Sound is an important recreational and commercial resource. Over 200,000 boats are registered Sound-wide; three quarters of a million sports fishermen fish this estuary, and its beaches accommodate 2.5 million visitors each year. Some 20 million tons of freight, much of it fuel and petroleum products, pass through its major ports annually. Forty-four sewage treatment plants discharge to the Sound.

With so many people depending on the Sound for recreation and livelihood, this resource has suffered very serious environmental degradation. The effects of combined sewer overflows, urban and agricultural runoff, atmospheric deposition, loss of coastal wetlands, and contaminated sediments have resulted in closed shellfish beds, closed beaches, and the huge algal blooms which create the condition of low dissolved oxygen known as Hypoxia.

Overlapping government and agency jurisdictions complicate the problem of restoring the quality of the Sound. There are at least 150 separate local, state, regional and federal jurisdictions with responsibilities for Long Island Sound, including the states of Connecticut and New York, and two regions of the U.S. EPA.

In 1987, Congress authorized the Long Island Sound Study as part of the National Estuaries Program. The management conference convened for the study, (including representatives of the states of New York and Connecticut, Regions I and II of the U.S. EPA, citizen groups, state legislatures, cities, and industry), is due to complete its Comprehensive Conservation and Management Plan (CCMP) for Long Island Sound in 1991. The states of Connecticut and New York have committed to implementing it.

The Long Island Sound Improvement Act (S. 1772) would provide ongoing support for the existing management conference and assure accountability for the clean-up of the Sound. The Committee views Long Island Sound as a unique natural resource and is convinced that ongoing support for protection of the Sound is essential. It is not the intention of the Committee that this legislation establish a precedent for other areas being addressed under the National Estuaries Program. Key provisions of this legislation are included as Part A of Title V of the reported bill.

## LAKE CHAMPLAIN

The environmental challenges facing Lake Champlain, encompassing the States of Vermont, New York and the Province of Quebec, Canada, merit special consideration. As a result of environmental threats by point-source pollution, nonpoint source pollution from urban areas, farms, sewage, industrial wastewater treatment plants, and airborne toxic chemicals, as well as an increasing demand for recreation, Lake Champlain is at a critical point in its history.

The State health departments of New York and Vermont have issued fish consumption advisories for trout taken from Lake Champlain due to contamination by PCBs. In May, 1990, the Vermont Health Commissioner issued an advisory for walleye due to elevated levels of mercury in fish taken from the basin. Over the past few summers, public beaches have closed periodically due to high fecal coliform concentrations, and the states have issued scores of boil water notices. Of grave concern is the widespread proliferation of sea lamprey and the need for a coordinated plan for its control.

There is generally consensus among international, federal, and state agencies that additional measures are necessary to restore and preserve the natural integrity of Lake Champlain and to prevent further determination of water quality. Lake Champlain has been recognized as an international biosphere reserve by the Man in the Biosphere Program of the United Nation's Educational, Scientific, and Cultural Organization (UNESCO). Public Law 83-566 established the LaPlatte River Watershed Project, a Federal-State-Local cooperative effort to address and monitor nonpoint sources of pollution. In 1988, Vermont, New York and Quebec signed a Memorandum of Understanding on Environmental Cooperation for Lake Champlain. Vermont was among the first states to have its Nonpoint Source Management Program approved by the EPA, and Vermont and New York are currently conducting a basin-wide phosphorus management program with assistance from EPA.

Because it is an international waterway, with overlapping government and agency jurisdictions, a coordinated federal effort must be maintained. The EPA Administrator is to detail staff from region I and region II to implement the provisions of this subsection, and such staff should be located within the Lake Champlain basin. In issuing grants, the Administrator may fund demonstration projects for purposes of assessing such projects as mitigation techniques.

On February 6, 1990, in an effort to consolidate and build upon existing programs, and to create new methods of protecting water quality within the Lake Champlain basin, Senators Jeffords, Leahy, Moynihan and D'Amato introduced S. 2074, the "Lake Champlain Special Designation Act". The provisions of Part B of Title V of the reported bill incorporate the key provisions of S. 2074.

## ONONDAGA LAKE

Onondaga Lake is located in central New York and borders on the city of Syracuse. Onondaga Lake has been called the most pol-

luted large body of water in the nation. Other lakes, rivers or bays may have higher concentrations of individual contaminants, but in terms of overall use impairment due to pollution, Onondaga Lake has few rivals.

From 1884 to 1985 the Allied Chemical Corporation and its predecessors produced synthetic soda ash at a plant on the lakeshore, and discharged waste into the Lake. It is estimated that the lake contains 100 tons of mercury from the soda ash plant, and that as much as 30 percent of the lake's original volume has been lost due to a thick layer of material deposited on the lake bottom.

Swimming in the lake is not allowed, and fish cannot be eaten due to mercury contamination. In addition, discharges of raw sewage have been common due to combined sewer overflows.

Despite this high degree of toxic pollution, Onondaga Lake has not qualified as a Superfund site because its pollution is largely underwater. The Superfund Hazard Ranking System used by EPA to assess hazardous waste sites does not take into account the specifics of underwater waste sites.

The Onondaga Lake Restoration Act of 1988 (S. 27) would provide for a management conference to address the various pollution problems of the lake. Part C of title V of the reported bill includes key provisions of this bill.

#### DESCRIPTION OF THE REPORTED BILL

The reported bill amends the Clean Water Act and the Marine Protection Research and Sanctuaries Act to expand and strengthen programs for research and protection of marine waters and the Great Lakes.

The reported bill is a substitute to the Marine Protection Act (S. 1178) introduced by Senator Mitchell in June of 1989. The bill also includes key elements of the Comprehensive and Ocean Assessment and Strategy Act (S. 1179) introduced by Senator Lautenberg.

A number of other bills relating to coastal protection are included in the reported bill including—

- the National Sediment Contamination Survey Act (S. 1210) introduced by Senator Moynihan;
- the Marine Research Act (S. 587) introduced by Senator Mitchell;
- the Great Lakes Critical Programs Act (S. 1646) introduced by Senator Levin;
- the Long Island Sound Improvement Act (S. 1722) introduced by Senator Lieberman;
- the Onondaga Lake Restoration Act (S. 27) introduced by Senator Moynihan; and
- the Lake Champlain Special Designation Act (S. 2074) introduced by Senator Jeffords.

The objectives and central provisions of each of the six titles of the reported bill are summarized below.

(A) *Title I—Marine Research and Monitoring Programs.*—Title I of the bill provides for new authority for research of major regional marine ecosystems and national monitoring of marine environmental trends and conditions.

A key objective of this title is to provide for development of basic and applied research of the large, multi-State, biogeographic marine regions around the country. The bill would authorize the development of regional organizations capable of formulating long-range research plans for each region and provide limited funding to implement plans. This research will provide an essential foundation for environmental monitoring and pollution control programs.

Another important objective of this title is to establish a coordinated monitoring program for assessment of marine environmental conditions and trends at the national level. Accurate information on marine environmental conditions is essential to planning of effective pollution control programs and evaluation of the effectiveness of such programs.

(B) *Title II—Coastal Water Quality Protection Programs.*—Title II of the bill amends the Clean Water Act to expand and strengthen coastal pollution control programs.

A primary objective of this title is to identify degraded coastal waters and provide the EPA Administrator and States with special new authorities to reverse the decline in environmental quality of these waters. EPA will identify degraded waters, focus the existing National Estuary Program on these waters, and implement a range of new pollution control authorities, including tougher discharge permit authorities, expedited schedules for control of other sources of water pollution, tougher pretreatment standards, and stricter requirements for sewage discharge from vessels.

Another important objective of this title is to improve controls over discharge of toxic pollutants to coastal waters. The EPA is to develop a strategy to use Toxic Release Inventory Data, developed under Superfund, in water programs, and implement tougher programs for pretreatment of industrial wastes discharged to wastewater treatment plants.

A third major objective of this title is development and implementation of plans for the elimination of overflows from combined storm and sanitary sewers (CSO's). Federal, State, and local governments are to work together to develop CSO elimination plans and to implement plans over a specified period. Elimination of CSOs can be expected to produce dramatic increases in the quality of receiving waters.

A fourth objective of this title is expansion of the number of enforceable water quality standards for marine waters and initiation of the process of developing criteria and enforceable standards for marine sediment quality. This new authority is expected to result in gradual but substantial improvements in point source discharge permits and corresponding decreases in pollutant discharges.

A final major objective of this title is to improve controls over nonpoint sources of pollution to coastal waters. New authorities would establish coordination between State water quality standards programs and the Federal flood insurance program, expand education programs for management of coastal land, and link the agricultural conservation reserve program with coastal water quality programs. These new initiatives are intended to complement State nonpoint pollution control programs established under section 319 of the Clean Water Act.



(C) *Title III—Marine Sediment Contamination.*—Title III of the reported bill amends the Marine Protection, Research and Sanctuaries Act to better address the dumping of dredged material, with special attention to dumping of contaminated dredged material.

The title includes the provisions of S. 1210 calling for a national survey of contaminated sediment. This study will provide vital information about the location and extent of sediment contamination throughout the country.

A central objective of the title is to improve the identification and regulation of the dumping of contaminated sediment. A new national goal of eliminating ocean dumping of material which violates sediment quality standards is established. In addition, the existing process for issuing permits for ocean dumping of dredged material is revised to give greater attention to dumping of contaminated material.

Dredge material with contaminants in excess of Clean Water Act sediment criteria and standards is subject to a special permit process administered by the EPA rather than the U.S. Army Corps of Engineers. Sediment criteria and standards will serve as a trigger for EPA issuance of permits. EPA is to use criteria developed under section 102 to determine whether dumping of such material complies with the requirements of section 103(d). This process will ensure that the dredging of navigation channels and harbors and properly managed ocean disposal of dredged material can proceed if it meets the requirements of section 103(d). It is not the intention of the Committee that these provisions result in substantial delays in dredge projects or substantially increased use of upland disposal sites.

Another major objective of this title is to improve management of ocean dumping of all dredge material. The authority of States to set sediment quality standards more stringent than the Federal government in State waters is assured, new requirements for development of management plans for dump sites are established, and tougher penalties for violations of the Act are provided. The scope of the Marine Protection, Research and Sanctuaries Act is changed to assure that expanded protection requirements apply to all marine waters.

(D) *Title IV—Great Lakes Programs.*—The bill includes key elements of the Great Lakes Act (S. 1646) strengthening and expanding the existing requirements of the Clean Water Act concerning the Great Lakes.

The central provisions of this title set specific action schedules for Great Lakes protection programs and projects and increase funding for EPA's Great Lakes programs from \$11 to \$25 million in fiscal year 1991.

This title also provides for an important initiative to apply water quality contaminant criteria to the Great Lakes and to assure the adoption of more uniform, enforceable water quality standards for the Great Lakes.

Other provisions of the title would assure monitoring of confined disposal facilities in the Great Lakes and provide for development of information on contaminants in Great Lake sediments.

(E) *Title V—Special Areas Protection.*—This title provides new authority to address the unique water quality problems of Long

Island Sound, Lake Champlain, and Onondaga Lake. Development of programs to address the water quality problems in these special areas will demonstrate methods and measures to protect other vital water resources around the country.

Key provisions of the Long Island Sound Improvement Act (S. 1722) establishing a program for the protection of Long Island Sound are included in this title.

The title also includes key elements of the Lake Champlain Special Designation Act (S. 2074) establishing a management conference for Lake Champlain.

Finally, the title includes provisions from the Onondaga Lake Restoration Act (S. 27) establishing a management conference to address pollution problems in Onondaga Lake, New York.

(F) *Title VI—Other Provisions.*—Title VI includes new authorities for identification of unregulated contaminants in water and sediment, new requirements for coordination of Federal programs related to coastal water quality, and a number of reports and studies of the marine environment.

#### SECTION-BY-SECTION DESCRIPTION

The Coastal Protection Act of 1990 expands and strengthens research and protection programs in marine waters and the Great Lakes.

*Section 1: Short Title and Table of Contents.*—This legislation may be cited as the "Coastal Protection Act of 1990."

*Section 2: Findings.*—The findings of Congress on the seriousness and extent of coastal pollution and the need for corrective action to protect coastal waters are presented.

*Section 3: Policy.*—It is the policy of the United States to protect the integrity of the marine environment and the Great Lakes so that the ecological, commercial and recreational values of these resources are not impaired by pollution.

#### TITLE I—MARINE RESEARCH AND MONITORING PROGRAMS

This title establishes regional marine research programs and a national marine monitoring program.

*Section 101: Regional Marine Research Programs.*—A new title IV is added to the Marine Protection, Research and Sanctuaries Act providing for regional marine research programs. The new title would include the following sections—

*Section 401: Purpose.*—Identifies the purpose of the title, including establishment of marine research programs in different regions of the country, development of long-range research plans for these regions, and issuance of reports on the condition and health of each region's waters.

*Section 402: Definitions.*—Key terms are defined.

*Section 403: Regional Marine Research Programs.*—Authorizes establishment of regional marine research programs and outlines the purposes, authorities, and areas of investigation of the programs.

Establishes requirements for organizing the regions, which include involving the marine research institutions in the



region, approval of State Governors in the region, and approval of a Federal oversight board.

Identifies ten marine research regions and indicates the boundaries of the regions.

*Section 404: Regional Research Plans.*—Provides regional research plans, coordination of plans with related activities, involvement of interested parties, and review by a Federal oversight board.

*Section 405: Research, Support and Equipment Grants.*—Provides for grants to support the operation of the research programs and implementation of the research plan, including national level peer review of project proposals and purchase of essential equipment.

*Section 406: Regional Assessment.*—Provides for public reports on trends and conditions in marine waters of each region on a three-year basis.

*Section 407: Regional Marine Research Oversight Board.*—Provides for an oversight board made up of Federal agencies and chaired by EPA.

*Section 408: Authorizations.*—Provides for a total authorization of \$30 million. Of this amount, each of 10 regions is eligible for a base grant of \$3 million, except for the Tropical region which is eligible for \$1.5 million (\$28.5 million). Additional funds are for operation of the national board (\$0.5 million) and equipment purchases (\$1 million).

*Section 102: National Marine Monitoring Program.*—A new title V is added to the Marine Protection, Research and Sanctuaries Act providing for a comprehensive marine monitoring program.

*Section 501: Purposes.*—Identifies the purposes of the bill which include establishing a comprehensive program for monitoring the nation's marine ecosystems, developing uniform indicators of ecosystem quality, and providing reports to the Congress on marine environmental quality.

*Section 502: Definitions.*—Key terms are defined.

*Section 503: Comprehensive Marine Monitoring Program.*—EPA is to establish a program to measure the environmental quality of the nation's marine ecosystems, including the quality of water, sediment, and living resources, sources of environmental degradation, effect of pollution control programs, and short-term and long-term trends in environmental quality.

The monitoring program also is to include development of uniform indicators of marine environmental quality and monitoring protocols, and a system for reviewing monitoring methods.

Within two years after the date of enactment of this title, EPA and other Federal agencies are to submit to Congress an implementation strategy identifying the responsibilities of each agency in implementing the monitoring program.

*Section 504: Report to Congress.*—On September 30 of each year, EPA is to submit to Congress a report describing the conditions of the nation's marine ecosystem.

*Section 505: Information Transfer.*—EPA is to assure the dissemination of information regarding marine ecosystems to State and local governments and to other organizations.

*Section 506: Air Deposition Research and Monitoring.*—EPA is to develop and implement a program to determine the effects of atmospheric pollutants on the marine environment and submit a report to Congress summarizing the findings of these studies within two years of the date of enactment.

*Section 507: Authorization.*—A total of \$15,000,000 is authorized for the implementation of this title in each of fiscal years 1991-1995.

## TITLE II—WATER QUALITY PROTECTION PROGRAM

Title II of this Act amends the Clean Water Act by expanding and strengthening programs for controlling pollutions in coastal waters.

*Section 201: Coastal Environmental Toxics Release Assessment.*—Within one year of the date of enactment, the Administrator is to develop a strategy for using Toxic Release Inventory data reported pursuant to section 313 of Superfund. The strategy is to address using the data to verify permits, develop effluent guidelines, identify contaminants for which criteria are needed, and target compliance and enforcement efforts.

*Section 202: National Estuary Program.*—Amends section 320 of the Clean Water Act to increase the National Estuary program authorization from \$12 to \$25 million per year and to add Casco Bay, Maine; Lower St. Johns river, Florida; and Tampa Bay, Florida to the list of estuaries to be given priority for management conferences.

This section also provides that, beginning one year from the date of enactment, the Administrator shall convene management conferences pursuant to section 320 only for waters designated as degraded pursuant to section 304(n). Research and reporting requirements of section 320 are also clarified.

*Section 203: Priority Marine Waters.*—The Administrator is to identify and designate marine waters which are degraded and do not support a balanced, indigenous population of fish, shellfish, and wildlife.

The Administrator is to excise special authorities for the protection of designated waters including more stringent requirements for discharge permits, wetlands assessments, pretreatment, storm-water discharges, and nonpoint pollution control.

*Section 204: Pretreatment Requirements.*—Publicly owned treatment works discharging to a waterbody designated pursuant to section 304(n) are to establish or revise a pretreatment program to include individual discharge permits, revised limits for toxics, upgraded sampling, and advance notification by industrial users of a change in the volume or character of discharges.

*Section 205: Nonpoint Source Pollution Control.*—The Federal government and State governments are given new authority to control nonpoint sources of pollution to marine waters.

States are given authority to review controls over development in the 100 year marine flood to assure that such controls are adequate to maintain State water quality standards.

A National Coastal Outreach Program is established to provide information on land management practices for pollution prevention to owners of coastal lands.

The Administrator and the Secretary of Agriculture are required to work together to use the Conservation Reserve Program to protect coastal waters from nonpoint sources of pollution associated with agriculture.

*Section 206: Marine Sanitation Devices.*—Section 312 of the Clean Water Act is expanded to establish a no discharge standard for vessels in waters designated as degraded under the new section 304(n) of the Act and to provide for penalties for violations. EPA and the Coast Guard are to prepare a study assessing the availability of facilities for the removal of sewage from vessels in coastal waters.

*Section 207: Coastal Combined Sewer Overflows.*—The Clean Water Act is amended to establish a process for eliminating overflows from combined storm and sanitary sewers to coastal waters. This section requires States to inventory combined stormwater and sanitary sewer discharges to coastal waters.

EPA is to work with the States and municipalities to develop specific plans, within three years of enactment, for eliminating overflows which emphasize stormwater management, rather than system separation. Plans are to be implemented within seven years of the date of approval, unless the discharge is to a waterbody designated pursuant to section 304(n) in which case plans are to be implemented in five years.

The Administrator may extend the compliance periods by up to two years if he determines that an applicant has acted in good faith and that compliance with the schedule in the plan is not feasible.

EPA is to publish, within one year of the date of enactment, guidance on low cost measures for combined sewer overflow elimination and is also to publish information on the degree of pollutant removal attainable through the application of secondary treatment.

Title VI of the Clean Water Act is amended to clarify that State revolving loan funds are available to implement combined sewer overflow elimination projects.

The reserve funds for combined sewer overflows established in title II of the Act are transferred to title VI, the reserve is established at 1 percent of appropriated funds, and the uses of the reserve are identified as support for the development of the combined sewer overflow plans required by this section.

*Section 208: Marine Water Quality and Sediment Quality Criteria and Standards.*—EPA is to develop and promulgate criteria and numerical standards for toxic and other pollutants in marine waters and sediments.

Within one year of the date of enactment, EPA is to prepare a five-year plan for developing marine water quality and sediment quality criteria. Within two years of enactment, EPA is to revise existing criteria for freshwater to address marine water and sediment.

States are to use criteria to develop and adopt enforceable standards for marine water and sediment. Marine water quality and sediment quality standards are to assure the protection and propagation of a balanced, indigenous population of fish, shellfish and

wildlife and provide for recreation in and on the water. If a State fails to adopt standards within 2 years of the date of enactment, the EPA shall establish a standard not later than the end of the two year period.

*Section 209: Ocean Discharge Criteria.*—The Administrator is granted authority to apply ocean discharge criteria under section 403 of the Clean Water Act in issuance of permits for discharges to estuarine waters. In the case of degraded waters designated pursuant to section 304(n), the Administrator is directed to consider ocean discharge criteria in section 403 in permit issuance. This section also clarifies that such permits are to assure a balanced, indigenous population of fish, shellfish and wildlife.

Finally, in issuing permits to discharge to marine waters, the Administrator must consider the need to discharge, based on a showing of full use of pollution prevention measures.

*Section 210: Chesapeake Bay.*—The authorization for the Chesapeake Bay program is extended to fiscal years 1991 and 1992.

*Section 211: Definitions.*—Key terms are defined.

### TITLE III—MARINE SEDIMENT CONTAMINATION

This title amends the Clean Water Act and the Marine Protection, Research and Sanctuaries Act by expanding and improving controls over management and the dumping of contaminated sediments.

*Section 301: Sediment Contamination Survey.*—EPA is to conduct a survey of sediment contamination in coastal waters and provide a report to the Congress within two years of the date of enactment.

*Section 302: Marine Sediment Contamination.*—Amends section 102(a) of the Marine Protection, Research and Sanctuaries Act to add a new national goal of eliminating ocean dumping of sediment which violates sediment quality standards. The Act is also amended to provide that the dumping of sediment containing contaminants in excess of sediment quality standards developed pursuant to the Clean Water Act requires a special permit from the EPA.

*Section 303: State Ocean Dumping Requirements.*—Clarifies Section 106(d) of the Marine Protection, Research and Sanctuaries Act to assure that States may issue more stringent requirements for ocean dumping in State waters and that EPA and the Corps of Engineers will comply with such requirements.

*Section 304: Site Designation.*—Expands requirements for designation of dumping sites under section 102(c) of the Marine Protection, Research and Sanctuaries Act.

EPA is to develop a site management plan for each site providing for baseline monitoring, special conditions for site management, and long-term management and termination of use of the site. Plans are to be developed within three years.

*Section 305: Permit Conditions.*—Clarifies section 104(a) of the Marine Protection, Research and Sanctuaries Act to assure that permits reflect site management plan conditions, that permits are not to exceed three years, and that permit applicants consider pollution prevention measures.



*Section 306: Ocean Dumping Penalties.*—Amends section 105 of the Marine Protection, Research and Sanctuaries Act to increase penalties for violations of the Act.

*Section 307: Mud Dump Site.*—Eliminates the existing requirement to designate a new dredge material dump site more than twenty miles off shore and requires the EPA and the Corps to submit a management plan for dredge material from New York harbor.

#### TITLE IV—GREAT LAKES PROGRAMS

This title updates and strengthens the authorities of the Clean Water Act relating to protection of the Great Lakes.

*Section 401: Short Title.*—This title may be cited as the "Great Lakes Critical Programs Act of 1990".

*Section 402: Great Lakes Action Schedules.*—Section 118 of the Clean Water Act is amended to set deadlines for specific programs to protect the Great Lakes. These programs implement certain goals and objectives of the Great Lakes Water Quality Agreement between the United States and Canada.

Deadlines are established for EPA's completion of an ongoing effort known as the Great Lakes Water Quality Initiative to provide guidance to States on minimum water quality standards, anti-degradation policies and implementation procedures for the Great Lakes System. This guidance must conform with the Great Lakes Water Quality Agreement and must be no less restrictive than current law and national water quality criteria and guidance. The guidance must specify numerical limits on pollutants in ambient Great Lakes waters to protect human health, aquatic life, and wildlife.

Within two years of the publication of this guidance, States are to adopt water quality standards, antidegradation policies and implementation procedures for their Great Lakes waters based upon this guidance. If a State fails to act within the two year period, EPA must issue standards, policies and procedures for the Great Lakes waters in that State in accordance with the published guidance.

Deadlines and timetables are established for the States to complete Remedial Action Plans and for EPA to complete a Lakewide Management Plan for Lake Michigan. The United States agreed to ensure the development of such plans in the Great Lakes Water Quality Agreement.

EPA's Great Lakes National Program Office, in consultation with the Coast Guard, is required to identify areas within the Great Lakes which are likely to experience spills of oil or toxic chemicals and to identify weaknesses in Great Lakes programs to respond to or prevent such spills.

*Section 403: Contaminated Sediments.*—A more detailed schedule is established for conducting demonstrations of promising technologies to clean up contaminated sediments at four specified locations in the Great Lakes under the ongoing Assessment and Remediation of Contaminated Sediment Program. This section will assure that demonstrations are conducted on-site.



In addition, new authority is provided for development of information on contaminants in Great Lakes sediment to protect human health, aquatic life and wildlife from the bioaccumulation of toxins. Information is to be published no later than the date EPA publishes criteria for marine sediments.

*Section 404: Definitions.*—Key terms are defined.

*Section 405: Great Lakes Confined Disposal Facilities.*—The Administrator is to develop and implement management plans for confined disposal facilities in the Great Lakes. These facilities were constructed by the Army Corps of Engineers to contain sediments dredged from the Great Lakes; 32 facilities have been built to date and additional facilities are planned. Management plans are to be implemented within one year and are to address monitoring of such facilities, the long-term use and management of the site, and a schedule for review and evaluation of the plant not less than every five years.

*Section 406: Authorization.*—Section 118 of the Clean Water Act is amended to increase the authorization for Great Lakes programs from \$11 to \$25 million for fiscal year 1991. The increased funds are to be used by the EPA to meet the new schedules and requirements of this title. The Agency should give high priority to completion of Remedial Action Plans in its allocation of increased funds.

## TITLE V—SPECIAL AREAS PROTECTION

Title V provides new authority for programs to protect especially sensitive areas including Long Island Sound, Lake Champlain, and Lake Onondaga.

### PART A—LONG ISLAND SOUND

*Section 501: Short Title.*—This part may be cited as the Long Island Sound Improvement Act of 1990.

*Section 502: Amendment to the Federal Water Pollution Control Act.*—Establishes a new section 119 of the Clean Water Act providing for an ongoing program to protect the environmental quality of Long Island Sound.

The EPA is to continue the existing management conference on Long Island Sound and establish an office to assist the management conference in the development and implementation of a comprehensive conservation and management plan for the Sound, conduct additional studies, coordinate the work of Federal agencies, and provide information to the public.

The EPA is authorized to make grants for projects and studies to support the management plan, including research, citizen involvement, and enforcement and \$3 million is authorized to be appropriated for such grants each year.

*Section 503: Relationship to Other Laws.*—Clarifies the rights of States to establish standards for dumping of dredge material in Long Island Sound which are more stringent than Federal standards.

### PART B—LAKE CHAMPLAIN

*Section 510: Short Title.*—This part may be cited as the Lake Champlain Special Designation Act of 1990.

*Section 511: Demonstration Program.*—Amends the Clean Water Act to provide that Lake Champlain is to be considered for funding under the Clean Lakes Program pursuant to section 314 of the Clean Water Act.

*Section 512: Lake Champlain Management Conference.*—Amends the Clean Water Act to establish a new section 120 providing for a management conference to develop a plan to protect the quality of Lake Champlain.

A management conference, to include representatives of Federal agencies and the States of New York and Vermont, is established. The conference is to conduct a research program and develop a pollution prevention, control and restoration plan for the Lake. The Administrator is authorized to make grants to support development of the plan. An authorization of \$2 million is provided for each of fiscal years 1991-1995.

The Committee encourages the Management Conference to pay attention to the recommendations of the Vermont and New York steering committee and the Lake Champlain Citizen Advisory Committee; to confer with the Fish and Wildlife Management Cooperative to ensure key resources are protected; and to work with the National Park Service to protect historical, cultural, and archeological sites within and along the Lake.

*Section 513: Federal Program Coordination.*—The Secretary of Agriculture and the Secretary of Interior are given additional authorities and authorizations for the protection of Lake Champlain.

#### PART C—ONONDAGA LAKE

*Section 520: Short Title.*—This title may be cited as the Onondaga Lake Restoration Act.

*Section 521: Amendment to the Federal Water Pollution Control Act.*—Amends the Clean Water Act to establish a new section 121 providing for a management conference for the restoration, conservation, and management of Onondaga Lake, New York.

A management conference, to include representatives of Federal agencies and the State of New York and local governments, is established. The conference is to conduct a research program and develop a pollution prevention, control and restoration plan for the Lake. The Administrator is authorized to make grants to support development of the plan. Such sums as may be necessary are authorized to carry out this section.

#### TITLE VI—OTHER PROVISIONS

*Section 601: Identification of Unregulated Contaminants.*—Within one year, the Administrator is to submit a report to Congress identifying unregulated contaminants in coastal waters and recommending actions to control such contaminants.

*Section 602: Federal Agency Responsibilities.*—A new section 520 of the Clean Water Act provides that the Administrator is to work with Federal agencies to assure that actions of these agencies do not degrade coastal waters. Within 2 years of the date of enactment, the Administrator is to report to Congress on policy changes needed to protect coastal waters.

*Section 603: Reports and Studies.*—Provides for reports to Congress on the health and economic impacts of marine pollution, the causes of marine algal blooms, and the potential use of microorganisms to degrade pollutants in the marine environment.

#### HEARINGS

The Environment and Public Works Committee held a series of hearings on the underlying bill (S. 1178) and related legislation, including the Comprehensive Ocean Assessment and Strategy Act (S. 1179) and the Marine Research Act (S. 587), on July 12 and 25, 1989 (see Senate Hearing 101-535). These hearings were held jointly by the Superfund, Ocean and Water Protection Subcommittee and the Environmental Protection Subcommittee in Washington, D.C.

Witnesses at these hearings, which were chaired by Senator Lautenberg, included the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, the Office of Technology Assessment, national organizations (e.g. the National League of Cities, the American Association of Port Authorities, and the Association of Metropolitan Sewage Agencies), environmental organizations (e.g. Friends of the Earth, the National Resources Defense Council), professional organizations (e.g. the Association of State and Interstate Water Pollution Control Administrators, the Sea Grant Consortium), and other interested groups (e.g. the Cape May Chamber of Commerce, Fisherman Involved in Saving Habitat, the Louisiana Universities Marine Consortium, and Florida Atlantic University).

The Environmental Protection Subcommittee also held a hearing jointly with the Merchant Marine Committee of the House of Representatives on coastal protection legislation on August 11, 1989 in Portland, Maine (see Senate Hearing 101-535). Witnesses at the hearing included the Maine Department of Environmental Protection, the University of Maine, the Bigelow Laboratories, and interested groups including the Associated Fisheries of Maine, the Maine Audubon Society, and the Natural Resources Council of Maine.

The Subcommittee on Environmental Protection held a hearing on October 2, 1989 in Bridgeport, Connecticut, on S. 1722, the Long Island Sound Improvement Act of 1989 (S. 1722). At the hearing, Senators Dodd and Lieberman heard testimony from the EPA, the states of New York and Connecticut, citizen groups, the financial community, the state legislature, and cities regarding the need for continued organized cooperation, including the continued involvement of the Federal Government (see Senate Hearing 101-301).

The Subcommittee on Water Resources, Transportation, and Infrastructure held a hearing concerning Onondaga Lake in Syracuse, New York on April 27, 1989 (see Senate Hearing 101-80). Among witnesses testifying were Mr. William J. Muszynski, Acting Regional Administrator for the EPA's Region II Office, Col. Hugh F. Boyd III, Buffalo District Engineer for the Army Corps of Engineers, and Mr. Langdon Marsh, Executive Deputy Commissioner of the New York State Department of Environmental Conservation.

The Subcommittee on Water Resources, Transportation, and Infrastructure held hearings in Burlington, Vermont and Platts-

burgh, New York on June 28, 1989, to investigate the status of the water quality in Lake Champlain (see Senate Hearing 101-210). Chairman Moynihan and Senator Jeffords heard testimony from Federal, state and local officials, and scientists and individuals representing groups involved in lake protection efforts. Witnesses from the State of Vermont included the Commissioner of Environmental Conservation, the Commissioner of Agriculture and the Chairman of the Senate Natural Resources Committee. Witnesses from the State of New York included the Regional Director of the Department of Environmental Conservation, the Executive Director of the Adirondack Park Agency and the Executive Director of the Governor's Commission on the Adirondacks in the 21st Century.

The Senate Committee on Governmental Affairs, Subcommittee on Oversight of Government Management, held field hearings on "Oversight of EPA and the Great Lakes Water Quality Agreement" in April and May of 1989 (see Senate Hearing 101-242) and a September 1989 hearing on "Oversight of Oil Spill Protections for the Great Lakes" (see Senate Hearing 101-354). Witnesses at the hearing included the EPA, the Coast Guard, the Department of the Interior, the Michigan Department of Natural Resources, the New York State Department of Environmental Conservation, the Wisconsin Department of Natural Resources and the Spill Control Association of America, the American Pilots Association, and the Marine Pollution Control Corporation.

#### ROLLCALL VOTES

Section 7(b) of rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any rollcall votes taken during consideration of this bill be announced in this report.

On June 12, 1990, the Environment and Public Works Committee ordered S. 1178, as amended, reported by a rollcall vote of 16 aye and 0 nay. Senators voting aye were Senators Burdick, Chafee, Moynihan, Simpson, Mitchell, Symms, Baucus, Durenberger, Lautenberg, Warner, Reid, Jeffords, Graham, Humphrey, Lieberman, and Metzenbaum.

#### REGULATORY IMPACT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact of the reported bill: It is not expected that there will be any new regulatory burdens created by the reported bill.

#### COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment and Control Act requires that each report contain a statement of the cost of the bill prepared by the Congressional Budget Office. That report follows:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
Washington, DC, June 27, 1990.

Hon. QUENTIN N. BURDICK,  
Chairman, Committee on Environment and Public Works,  
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for S. 1178, the Coastal Protection Act of 1990.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

C.G. NUCKOLS  
(For Robert D. Reischauer, Director).

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 1178.
2. Bill title: Coastal Protection Act of 1990.
3. Bill status: As amended and ordered reported by the Senate Committee on Environment and Public Works on June 12, 1990.
4. Bill purpose: This bill would expand federal and state programs for the protection of marine waters and the Great Lakes.
5. Estimated cost to the Federal Government: S. 1178 has substantial potential costs that cannot be estimated at this time, including: site designation costs for dredge material dump sites in inland areas as required under Title III, the costs after 1991 to construct the dredge disposal project for the New York/New Jersey Harbor region authorized in Title III, and the cost to implement a restoration plan for Lake Onondaga as authorized by Title V. These costs could total several hundred million dollars or more.

The table below summarizes CBO's estimate of the costs of another provisions of the bill.

[By fiscal year, in millions of dollars]

|                                     | 1991 | 1992 | 1993 | 1994 | 1995 |
|-------------------------------------|------|------|------|------|------|
| Authorizations:                     |      |      |      |      |      |
| Specified level.....                | 97   | 91   | 78   | 78   | 53   |
| Estimated level.....                | 23   | 23   | 23   | 28   | 31   |
| Total estimated authorizations..... | 120  | 114  | 101  | 106  | 84   |
| Estimated outlays.....              | 79   | 106  | 157  | 108  | 110  |

The costs of this bill fall within budget function 300.

Basis of estimate: This estimate assumes S. 1178 will be enacted late in fiscal year 1990, and the necessary funds will be appropriated for fiscal year 1991 and subsequent years. Authorization levels have been estimated based on information from the Environmental Protection Agency (EPA). Outlays are based on historical spending patterns for similar programs.

Title I would amend the Marine Protection, Research, and Sanctuaries Act by establishing regional marine research programs and by directing EPA to establish a comprehensive marine ecosystem



monitoring program. Over the 1991-1995 period, the bill authorizes \$30 million annually for regional marine program planning and research grants, and \$15 million annually for data collection, assessment, and reporting required under the marine monitoring program.

Title II amends the Federal Water Pollution Control Act to expand coastal water protection programs. The bill would require EPA to improve its programs for the coastal environment, and to prepare an annual report on industrial pollutant discharges into coastal waters. CBO estimates this report would cost about \$0.1 million annually. This title increases the authorization for the national estuary program from \$12 million annually to \$25 million and extends the authorization from 1991 to 1994.

The bill requires EPA to designate "priority marine waters", which cannot assure the protection of indigenous life nor allow for recreational activities. Based on information from EPA, we estimate this designation could cost up to \$2 million annually to implement over the five-year period.

S. 1178 requires EPA to develop guidelines for Publically Owned Treatment Works (POTWs) and to review new pretreatment programs for POTWs discharging into priority marine waters. In addition, EPA is required to develop a data based on toxic pollutants identified by POTWs. These activities are expected to cost about \$2.5 million over the 1991-1995 period.

Under this bill, EPA would be required to report to the Congress on suggested additions to the Department of Agriculture's Conservation Reserve Program, and to conduct other outreach programs with coastal property owners estimated to cost about \$0.6 million annually.

The bill directs EPA to develop standards to eliminate discharges of sewage from vessels operating in priority marine waters, and to report on the availability of suitable facilities for removal of sewage from vessels operating on coastal waters. We estimate these activities would cost about \$0.6 million in 1991 and 1992.

Under this bill EPA would inventory the problem of combined sewer overflows, provide guidelines for a program to eliminate combined sewer overflows, and approve state plans to eliminate such overflows. EPA is currently conducting these activities. S. 1178 clarifies that communities are eligible for state revolving loan funds for implementation of management plans to correct combined sewer overflows.

The bill directs EPA to develop numeric standards for pollutants found in marine water and sediment, an activity currently underway at EPA. Title II of the bill would make it necessary for EPA to issue new regulations for ocean discharges and would require EPA to publish guidelines on pollution prevention. These activities are expected to cost about \$1.3 million in 1991. Under this bill, EPA would be required to issue permits under section 403 of the Clean Water Act for discharges into designated waters. Based on information from EPA, we estimate additional permit and monitoring costs for these discharges would average \$9 million annually over the 1992-1995 period. Finally, this title extends the authorization for the Chesapeake Bay program office by authorizing \$13 million for 1991 and 1992.

Title III sets a national goal of eliminating the dumping of contaminated dredge material. It amends the Marine Protection, Research and Sanctuaries Act to transfer responsibility for issuing permits for certain dredge and fill activities from the U.S. Army Corps of Engineers to EPA and to apply the Ocean Dumping Act to all ocean waters including the estuarine zone. Based on information from EPA, CBO estimates the agency would incur additional costs of \$3 million annually over the 1991-1995 period for implementing and maintaining site management plans for ocean dumping sites. EPA also would be required to conduct a survey of sediment contamination in coastal waters, at an estimated cost of \$2 million.

This bill also would require EPA to designate inland sites for dumping dredge material. CBO cannot determine the cost of this provision because it is unclear how many inland dumping sites would be designated. The studies necessary for site designation would probably cost between \$300,000 and \$1 million each. There are over 200 inland sites currently in use.

S. 1178 would require the Secretary of the Army to implement a demonstration project to dispose of up to 10 percent of the material dredged from the New York/New Jersey Harbor region. The bill would authorize the appropriation of \$1 million in fiscal year 1991 for this purpose and such sums as may be necessary in 1992. Information from the U.S. Army Corps of Engineers (Corps) indicates that the costs of constructing the various disposal alternatives vary greatly, ranging from as little as \$5 million for beach disposal to as much as \$500 million for the construction of a containment island. The Corps has not determined which alternative for dredge disposal is appropriate. CBO is therefore unable to estimate the costs of implementing the demonstration project beyond 1991.

Title IV directs EPA's Great Lakes program office to: publish water quality guidance for the Great Lakes, publish a lakewide management plan for Lake Michigan, complete demonstration projects for the control and removal of toxic pollutants in the Great Lakes, and develop and implement management plans for confined disposal facilities in the lakes. The bill increases the authorization for the Great Lakes national program in 1991 from \$11 million to \$25 million.

Title V establishes management conferences for Lake Champlain, and Lake Onondaga. These conferences are to develop pollution prevention, control, and restoration plans. The bill authorizes \$2 million annually over the 1991-1995 period for the Lake Champlain conference.

The Secretary of Agriculture is authorized \$2 million annually over the five-year period to designate the Lake Champlain basin as a special project area under the Agricultural Conservation Program. In addition, the Secretary of the Interior is authorized \$1 million annually over the five-year period to carry out basic data collection and monitoring at Lake Champlain and to implement a fisheries resources program and a wildlife assessment survey.

S. 1178 requires that the management plan for Lake Onondaga be implemented upon approval by EPA, the Corps of Engineers, and the Governor of New York. CBO estimates about \$2 million would be required to conduct the conference and carry out plan de-

velopment. The cost to implement a restoration plan for Lake Onondaga cannot be estimated precisely at this time but, based on information from EPA and the State of New York, restoration is expected to cost between \$500 million and \$1 billion.

To help implement the Long Island Sound management plan, the bill authorizes \$3 million annually for the 1991-1996 period for research, planning and education grants. In addition, CBO estimates about \$10 million would be required annually to operate the Long Island Sound Office the bill requires.

Title VI directs EPA and the National Oceanic and Atmospheric Administration (NOAA) to study: unregulated pollutants in the marine and Great Lakes environment, federal agencies' contribution to the degradation of coastal waters, human health effects of pollution and shellfish consumption, economic impacts of marine degradation and toxic algal blooms. Based on information from EPA and NOAA, we estimate these studies would cost about \$1 million in 1991 and 1992.

6. Estimated cost to State and local governments: A detailed description of the potential state and local costs is not yet completed and will be provided shortly. Enactment of S. 1178 could entail significant additional costs for some state and local governments with combined sewer overflow problems to correct. Several states would also face additional regulatory costs if the bill were enacted.

7. Estimate comparison: None.

8. Previous CBO estimate: None.

9. Estimate prepared by: Laura Carter, Kim Cawley, Theresa Gullo, Deborah Reis, and Michael Sieverts.

10. Estimate approved by: Robert A. Sunshine, for James L. Blum, Assistant Director for Budget Analysis.

#### CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in black brackets, new matter is printed in *italic*, existing law in which no change is proposed is shown in roman:

#### FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED

(33 U.S.C. 466 et seq.)

An ACT to provide for water pollution control activities in the Public Health Service of the Federal Security Agency and in the Federal Works Agency, and for other purposes

#### TITLE I—RESEARCH AND RELATED PROGRAMS

\* \* \* \* \*

#### RESEARCH, INVESTIGATIONS, TRAINING, AND INFORMATION

SEC. 104. (a) \* \* \*

\* \* \* \* \*

(n)(1) The Administrator shall, in cooperation with the Secretary of the Army, the Secretary of Agriculture, the Water Resources

Council, and with other appropriate Federal, State, and interstate, or local public bodies and private organizations, institutions, and individuals, conduct and promote, encourage contributions to, continuing comprehensive studies of the effects of pollution, including sedimentation, in the estuaries and estuarine zones *and coastal waters* of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial purposes. Such studies shall also consider the effect of demographic trends, the exploitation of mineral resources and fossil fuels, land and industrial development, navigation, flood and erosion control, and other uses of estuaries and estuarine zones *and coastal waters* upon the pollution of the waters therein.

(2) In conducting such studies, the Administrator shall assemble, coordinate, and organize all existing pertinent information on the Nation's estuaries and estuarine zones *and coastal waters*; carry out a program of investigations and surveys to supplement existing information in representative estuaries and estuarine zones *and coastal waters*; and identify the problems and areas where further research and study are required.

(3) The Administrator shall submit to Congress, from time to time, reports of the studies authorized by this subsection but at least one such report during any six-year period. Copies of each such report shall be made available to all interested parties, public and private.

(4) For the purpose of this subsection, the term "estuarine zones" means an environmental system consisting of an estuary and those transitional areas which are consistently influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, bays, harbors, lagoons, inshore waters, and channels, and the term "estuary" means all or part of the mouth of a river or stream or other body of water having unimpaired natural connection with open sea and within which the sea water is measurably diluted with fresh water derived from land drainage.

(5) *The Administrator shall conduct such research and monitoring as needed to identify currently unregulated pollutants in the estuarine zone, coastal waters and the Great Lakes not currently addressed in a guideline, criteria, standard or requirement developed pursuant to title III of this Act.*

(6) *Within one year of the date of enactment of this paragraph, the Administrator shall submit to the Congress a report identifying unregulated pollutants in the estuarine zone, coastal waters and the Great Lakes and providing a plan (including specific actions and recommendations for integrating these contaminants into the pollution control authorities of this Act.*

\* \* \* \* \*

#### IN-PLACE TOXIC POLLUTANTS

SEC. 115. (a) The Administrator is directed to identify the location of in-place pollutants with emphasis on toxic pollutants in harbors and navigable waterways and is authorized, acting through the Secretary of the Army, to make contracts for the removal and



appropriate disposal of such materials from critical port and harbor areas. There is authorized to be appropriated \$15,000,000 to carry out the provisions of this section, which sum shall be available until expended.

(b) *STUDY.*—(1) *The Administrator shall, in consultation with the Administrator of the National Oceanic and Atmospheric Administration and other appropriate Federal agencies, conduct a comprehensive national survey of sediment contamination in coastal waters of the United States. The Administrator shall compile all existing information on the quantity, chemical and physical makeup, geographic location, of such contaminated sediments, the source of contamination, and the effects of contamination on the environment and human health.*

(2) *Not later than two years after the date of enactment of this section, the Administrator shall report to Congress the findings of the study pursuant to paragraph (1).*

\* \* \* \* \*

#### SEC. 117. CHESAPEAKE BAY.

(a) *OFFICE.* \* \* \*

\* \* \* \* \*

(d) *AUTHORIZATION OF APPROPRIATIONS.*—There are hereby authorized to be appropriated the following sums, to remain available until expended, to carry out the purposes of this section:

(1) \$3,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, [and 1990,] 1990, 1991, and 1992, to carry out subsection (a); and

(2) \$10,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, [and 1990,] 1990, 1991, and 1992, for grants to States under subsection (b).

#### SEC. 118. GREAT LAKES.

(a) *FINDINGS, PURPOSE, AND DEFINITIONS.*—

(1) \* \* \*

\* \* \* \* \*

(3) *DEFINITIONS.*—For purposes of this section, the term—

(A) “Agency” means the Environmental Protection Agency;

(B) “Great Lakes” means Lake Ontario, Lake Erie, Lake Huron (including Lake St. Clair), Lake Michigan, and Lake Superior, and the connecting channels (Saint Mary’s River, Saint Clair River, Detroit River, Niagara River, and Saint Lawrence River to the Canadian border);

(C) “Great Lakes System” means all the streams, rivers, lakes, and other bodies of water within the drainage basin of the Great Lakes;

(D) “Program Office” means the Great Lakes National Program Office established by this section; [and]

(E) “Research Office” means the Great Lakes Research Office established by subsection (d) [.] ;

(F) “area of concern” means a geographic area located within the Great Lakes, in which beneficial uses are impaired and which has been officially designated as such



under Annex 2 of the Great Lakes Water Quality Agreement;

(G) "Great Lakes States" means the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin;

(H) "Great Lakes Water Quality Agreement" means the bilateral agreement, between the United States and Canada which was signed in 1978 and amended by the Protocol of 1987;

(I) "Lakewide Management Plan" means a written document which embodies a systematic and comprehensive ecosystem approach to restoring and protecting beneficial uses of the open waters of each of the Great Lakes, in accordance with article VI and Annex 2 of the Great Lakes Water Quality Agreement; and

(J) "Remedial Action Plan" means a written document which embodies a systematic and comprehensive ecosystem approach to restoring and protecting the beneficial uses of areas of concern, in accordance with article VI and Annex 2 of the Great Lakes Water Quality Agreement.

\* \* \* \* \*

(c) GREAT LAKES MANAGEMENT.—

(1) FUNCTIONS.—The Program Office shall—

(A) in cooperation with appropriate Federal, State, tribal, and international agencies, and in accordance with section 101(e) of this Act, develop and implement specific action plans to carry out the responsibilities of the United States under the Great Lakes Water Quality Agreement of 1978;

(B) establish a Great Lakes system-wide surveillance network to monitor the water quality of the Great Lakes, with specific emphasis on the monitoring of toxic pollutants;

(C) serve as the liaison with, and provide information to, the Canadian members of the International Joint Commission and the Canadian counterpart to the Agency;

(D) coordinate actions of the Agency (including actions by headquarters and regional offices thereof) aimed at improving Great Lakes water quality; and

(E) coordinate actions of the Agency with the actions of other Federal agencies and State and local authorities, so as to ensure the input of those agencies and authorities in developing water quality strategies and obtain the support of those agencies and authorities in achieving the objectives of such agreement.

(2) GREAT LAKES WATER QUALITY GUIDANCE.—

(A) By June 30, 1991, the Administrator, after consultation with the Program Office, shall publish in the Federal Register for public notice and comment proposed water quality guidance for the Great Lakes System. Such guidance shall conform with the objectives and provisions of the Great Lakes Water Quality Agreement, shall be no less restrictive than the provisions of this Act and national

water quality and guidance, shall specify numerical limits on pollutants in ambient Great Lakes waters to protect human health, aquatic life, and wildlife, and shall provide guidance to the Great Lakes States on minimum water quality standards, antidegradation policies, and implementation procedures for the Great Lakes System.

(B) By June 30, 1992, the Administrator, in consultation with the Program Office, shall publish in the Federal Register, pursuant to this section the Administrator's authority under this chapter, final water quality guidance for the Great Lakes System.

(C) Within two years after such Great Lakes guidance is published, the Great Lakes States shall adopt water quality standards, antidegradation policies, and implementation procedures for waters within the Great Lakes System which are consistent with such guidance. If a Great Lakes State fails to adopt such standards, policies, and procedures, the Administrator shall promulgate them not later than the end of such two-year period. When reviewing any Great Lakes State's water quality plan, the agency shall consider the extent to which the State has complied with the Great Lakes guidance issued pursuant to this section.

(3) REMEDIAL ACTION PLANS.—

(A) For each area of concern for which the United States has agreed to draft a Remedial Action Plan, the Program Office shall ensure that the Great Lakes State in which such area of concern is located—

(i) submits a Remedial Action Plan to the Program Office by June 30, 1991;

(ii) submits such Remedial Action Plan to the International Joint Commission by January 1, 1992; and

(iii) includes such Remedial Action Plans within the State's water quality plan by January 1, 1993.

(B) For each area of concern for which Canada has agreed to draft a Remedial Action Plan, the Program Office shall, pursuant to subparagraph (c)(1)(C) of this section, work with Canada to assure the submission of such Remedial Action Plans to the International Joint Commission by June 30, 1991, and to finalize such Remedial Action Plans by January 1, 1993.

(C) For any area of concern designated as such subsequent to the enactment of this Act, the Program Office shall (i) if the United States has agreed to draft the Remedial Action Plan, ensure that the Great Lakes State in which such area of concern is located submits such Plan to the Program Office within two years of the area's designation, submits it to the International Joint Commission no later than six months after submitting it to the Program Office, and includes such Plan in the State's water quality plan no later than one year after submitting it to the Commission; and (ii) if Canada has agreed to draft the Remedial Action Plan, work with Canada, pursuant to subparagraph (c)(1)(C) of this section, to ensure the submission of such Plan to the International Joint Commission within

two years of the area's designation and the finalization of such Plan no later than eighteen months after submitting it to such Commission.

(D) The Program Office shall compile formal comments on individual Remedial Action Plans made by the International Joint Commission pursuant to section 4(d) of Annex 2 of the Great Lakes Water Quality Agreement and, upon request by a member of the public, shall make such comments available for inspection and copying. The Program Office shall also make available, upon request, formal comments made by the Environmental Protection Agency on individual Remedial Action Plans.

(4) LAKEWIDE MANAGEMENT PLANS.—The Administrator, in consultation with the Program Office shall—

(A) by January 1, 1992, publish in the Federal Register a proposed Lakewide Management Plan for Lake Michigan and solicit public comments;

(B) by January 1, 1993, submit a proposed Lakewide Management Plan for Lake Michigan to the International Joint Commission for review; and

(C) by January 1, 1994, publish in the Federal Register a final Lakewide Management Plan for Lake Michigan and begin implementation.

Nothing in this subparagraph shall preclude the simultaneous development of Lakewide Management Plans for the other Great Lakes.

(5) SPILLS OF OIL AND HAZARDOUS MATERIALS.—The Program Office, in consultation with the Coast Guard, shall identify areas within the Great Lakes which are likely to experience numerous or voluminous spills of oil or other hazardous materials from land based facilities, vessels, or other sources and, in consultation with the Great Lakes States, shall identify weaknesses in Federal and State programs and systems to prevent and respond to such spills. This information shall be included on at least a biennial basis in the report required by this section.

[(2)] (6) 5-YEAR PLAN AND PROGRAM.—The Program Office shall develop, in consultation with the States, a five-year plan and program for reducing the amount of nutrients introduced into the Great Lakes. Such program shall incorporate any management program for reducing nutrient runoff from non-point sources established under section 319 of this Act and shall include a program for monitoring nutrient runoff into, and ambient levels in, the Great Lakes.

[(3)] (7) 5-YEAR STUDY AND DEMONSTRATION PROJECTS.—(A) The Program Office shall carry out a five-year study and demonstration projects relating to the control and removal of toxic pollutants in the Great Lakes, with emphasis on the removal of toxic pollutants from bottom sediments. In selecting locations for conducting demonstration projects under this paragraph, priority consideration shall be given to projects at the following locations: Saginaw Bay, Michigan; Sheboygan Harbor, Wisconsin; Grand Calumet River, Indiana; Ashtabula River, Ohio; and Buffalo River, New York.

(B) The Program Office shall—

(i) by December 31, 1990, complete chemical, physical, and biological assessments of the contaminated sediments at the locations selected for the study and demonstration projects;

(ii) by December 31, 1990, announce the technologies that will be demonstrated at each location and the numerical standard of protection intended to be achieved at each location;

(iii) by December 31, 1992, complete full or pilot scale demonstration projects on site at each location of promising technologies to remedy/contaminated sediments; and

(iv) by December 31, 1993, issue a final report to Congress on its findings.

(C) The Administrator, after providing for public review and comment, shall publish information concerning the public health and environmental consequences of contaminants in Great Lakes sediment. Information published pursuant to this subparagraph shall include specific numerical limits to protect health, aquatic life and wildlife from the bioaccumulation of toxins. The Administrator shall, at a minimum, publish information pursuant to this subparagraph at the time of publication of marine sediment quality criteria pursuant to section 304 of this Act.

[(4)] (8) ADMINISTRATION'S RESPONSIBILITY.—The Administrator shall ensure that the Program Office enters into agreements with the various organizational elements of the Agency involved in Great Lakes activities and the appropriate State agencies specifically delineating—

(A) the duties and responsibilities of each such element in the Agency with respect to the Great Lakes;

(B) the time periods for carrying out such duties and responsibilities; and

(C) the resources to be committed to such duties and responsibilities.

[(5)] (9) BUDGET ITEM.—The Administrator shall, in the Agency's annual budget submission to Congress, include a funding request for the Program Office as a separate budget line item.

[(6)] (10) COMPREHENSIVE REPORT.—Within 90 days after the end of each fiscal year, the Administrator shall submit to Congress a comprehensive report which—

(A) describes the achievements in the preceding fiscal year in implementing the Great Lakes Water Quality Agreement of 1978 and shows by categories (including judicial enforcement, research, State cooperative efforts, and general administration) the amounts expended on Great Lakes water quality initiatives in such preceding fiscal year;

(B) describes the progress made in such preceding fiscal year in implementing the system of surveillance of the water quality in the Great Lakes System, including the monitoring of groundwater and sediment, with particular reference to toxic pollutants;

(C) describes the long-term prospects for improving the condition of the Great Lakes; and

(D) provides a comprehensive assessment of the planned efforts to be pursued in the succeeding fiscal year for implementing the Great Lakes Water Quality Agreement of 1978, which assessment shall—

(i) show by categories (including judicial enforcement, research, State cooperative efforts, and general administration) the amount anticipated to be expended on Great Lakes water quality initiatives in the fiscal year to which the assessment relates; and

(ii) include a report of current programs administered by other Federal agencies which make available resources to the Great Lakes water quality management efforts.

(11) *CONFINED DISPOSAL FACILITIES.*—(A) *The Administrator, in consultation with the Assistant Secretary of the Army for Civil Works, shall develop and implement, within one year of the date of enactment of this paragraph, management plans for every Great Lakes confined disposal facility.*

(B) *The plan shall provide for monitoring of such facilities, including—*

(i) *water quality at the site and in the area of the site;*

(ii) *sediment quality at the site and in the area of the site*

(iii) *the diversity, productivity, and stability of aquatic organisms at the site and in the area of the site; and*

(iv) *such other conditions as the Administrator deems appropriate.*

(C) *The plan shall identify the anticipated use and management of the site over the following twenty-year period including the expected termination of dumping at the site, the anticipated need for site management, including pollution control, following the termination of the use of the site.*

(D) *The plan shall identify a schedule for review and revision of the plan which shall not be less frequent than five years after adoption of the plan and every five years thereafter.*

\* \* \* \* \*

(h) *AUTHORIZATIONS OF GREAT LAKES APPROPRIATIONS.*—There are authorized to be appropriated to the Administrator to carry out this section not to exceed \$11,000,000 per fiscal year for the fiscal years 1987, 1988, 1989, [1990, and 1991.] and 1990, and \$25,000,000 for fiscal year 1991. Of the amounts appropriated each fiscal year—

(1) 40 percent shall be used by the Great Lakes National Program Office on demonstration projects on the feasibility of controlling and removing toxic pollutants;

(2) 7 percent shall be used by the Great Lakes National Program Office for the program of nutrient monitoring; and

(3) 30 percent or \$3,300,000, whichever is the lesser, shall be transferred to the National Oceanic and Atmospheric Administration for use by the Great Lakes Research Office.

*SEC. 119. (a) LONG ISLAND SOUND.*—*The Administrator shall continue the Management Conference of the Long Island Sound Study*



(hereinafter referred to as the "Conference") as established pursuant to section 320 of this Act, and shall establish an office (hereinafter referred to as the "Office") to be located on or near Long Island Sound.

(b) **ADMINISTRATION AND STAFFING OF OFFICE.**—The Office shall be headed by a Director, who shall be detailed by the Administrator, following consultation with the Administrators of EPA regions I and II, from among the employees of the Agency who are in civil service. The Administrator shall delegate to the Director such authority and detail such additional staff as may be necessary to carry out the duties of the Director under this section.

(c) **DUTIES OF THE OFFICE.**—The Office shall assist the Management Conference of the Long Island Sound Study in carrying out its goals. Specifically, the Office shall—

(1) assist and support the implementation of the Comprehensive Conservation and Management Plan for Long Island Sound developed pursuant to section 320 of this Act;

(2) conduct or commission studies deemed necessary for strengthened implementation of the Comprehensive Conservation and Management Plan including, but not limited to—

(A) population growth and the adequacy of wastewater treatment facilities,

(B) the use of biological methods for nutrient removal in sewage treatment plants,

(C) contaminated sediments, and dredging activities,

(D) nonpoint source pollution abatement and land use activities in the Long Island Sound watershed,

(E) wetland protection and restoration,

(F) atmospheric deposition of acidic and other pollutants into Long Island Sound,

(G) water quality requirements to sustain fish, shellfish, and wildlife populations, and the use of indicator species to assess environmental quality.

(H) State water quality programs, for their adequacy pursuant to implementation of the Comprehensive Conservation and Management Plan, and

(I) options for long-term financing of wastewater treatment projects and water pollution control programs.

(3) coordinate the grant, research and planning programs authorized under this section;

(4) coordinate activities and implementation responsibilities with other Federal agencies which have jurisdiction over Long Island Sound and with national and regional marine monitoring and research programs established pursuant to the Marine Protection, Research, and Sanctuaries Act;

(5) provide administrative and technical support to the conference;

(6) collect and make available to the public publications, and other forms of information the conference determines to be appropriate, relating to the environmental quality of Long Island Sound;

(7) not more than two years after the date of the issuance of the final Comprehensive Conservation and Management Plan

for Long Island Sound under section 320 of this Act, and biennially thereafter, issue a report to the Congress which—

(A) summarizes the progress made by the States in implementing the Comprehensive Conservation and Management Plan;

(B) summarizes any modifications to the Comprehensive Conservation and Management Plan in the twelve-month period immediately preceding such report; and

(C) incorporates specific recommendations concerning the implementation of the Comprehensive Conservation and Management Plan; and

(8) convene conferences and meetings for legislators from State governments and political subdivisions thereof for the purpose of making recommendations for coordinating legislative efforts to facilitate the environmental restoration of Long Island Sound and the implementation of the Comprehensive Conservation and Management Plan.

(d) GRANTS.—(1) The Administrator is authorized to make grants for projects and studies which will help implement the Long Island Sound Comprehensive Conservation and Management Plan. Special emphasis shall be given to implementation, research and planning, enforcement, and citizen involvement and education.

(2) State, interstate, and regional water pollution control agencies, and other public or nonprofit private agencies, institutions, and organizations held be eligible for grants pursuant to this subsection.

(3) Citizen involvement and citizen education grants under this subsection shall not exceed 95 per centum of the costs of such work. All other grants under this subsection shall not exceed 50 per centum of the research, studies, or work. All grants shall be made on the condition that the non-Federal share of such cost are provided from non-Federal sources.

(e) AUTHORIZATIONS.—(1) There is authorized to be appropriated to the Administrator for the implementation of this section, other than subsection (d), such sums as may be necessary for each of the fiscal year 1991 through 1996.

(2) There is authorized to be appropriated to the Administrator for the implementation of subsection (d) not to exceed \$3,000,000 for each of the fiscal years 1991 through 1996.

#### LAKE CHAMPLAIN MANAGEMENT CONFERENCE

SEC. 120. (a) ESTABLISHMENT.—There is established a Lake Champlain Management Conference to develop a comprehensive pollution prevention, control, and restoration plan for Lake Champlain. The Administrator shall convene the management conference within ninety days of the date of enactment of this section.

(b) MEMBERSHIP.—The Member of the Management Conference shall include, at a minimum representatives of—

(1) the Governors of the States of Vermont and New York;

(2) each interested Federal agency, not to exceed a total of five members;

(3) the Vermont and New York chairpersons of the Vermont, New York, Quebec Citizens Advisory Committee for the Environmental Management of Lake Champlain;

- (4) four representatives of the State legislature of Vermont;
- (5) four representatives of the State legislature of New York;
- (6) six persons representing local governments having jurisdiction over any land or water within the Lake Champlain basin, as determined appropriate by the Governors; and

(7) eight persons representing affected industries, nongovernmental organizations, public and private educational institutions, and the general public, as determined appropriate by governmental Citizens Advisory Committee for the Environmental Management of Lake Champlain, but not to the current members of the Citizens Advisory Committee.

(c) **TECHNICAL ADVISORY COMMITTEE.**—(1) The Management Conference shall, not later than one hundred twenty days after the date of enactment of this section, appoint a Technical Advisory Committee.

(2) Such Technical Advisory Committee shall consist of officials of appropriate departments and agencies of the Federal Government; the State governments of New York and Vermont; and governments of political subdivisions of such States; and public and private research institutions.

(d) **RESEARCH PROGRAM.**—The Management Conference shall establish a multi-disciplinary environmental research program for Lake Champlain. Such research program shall be planned and conducted jointly with the Lake Champlain Research Consortium.

(e) **POLLUTION PREVENTION, CONTROL, AND RESTORATION PLAN.**—(1) Not later than three years after the date of the enactment of this section, the Management Conference shall publish a pollution prevention, control, and restoration plan (hereafter in this section referred to as the "Plan") for Lake Champlain.

(2) The Plan developed pursuant to this section shall—

(A) identify corrective actions and compliance schedules addressing point and nonpoint sources of pollution necessary to restore and maintain the chemical, physical and biological integrity of water quality, a balanced, indigenous population of shellfish, fish and wildlife, recreational, and economic activities in and on the lake;

(B) incorporate environmental management concepts and programs established in State and Federal plans and program in effect at the time of the development of such plan;

(C) clarify the duties of Federal and State agencies in pollution prevention and control activities, and to the extent allowable by law, suggest a timetable for adoption by the appropriate Federal and State agencies to accomplish such duties within a reasonable period of time;

(D) describe the methods and schedules for funding of programs, activities, and projects identified in the Plan, including the use of Federal funds and other sources of funds; and

(E) include a strategy for pollution prevention and control that includes the promotion of pollution prevention and management practices to reduce the amount of pollution generated in the Lake Champlain basin.

(3) The Administrator, in cooperation with the Management Conference, shall provide for public review and comment on the draft Plan. At a minimum, the Management Conference shall conduct

one public meeting to hear comments on the draft plan in the State of New York and one such meeting in the State of Vermont.

(4) Not less than one hundred and twenty days after the publication of the Plan required pursuant to this section, the Administrator shall approve such plan if the plan meets the requirements of this section and the Governors of the States of New York and Vermont concur.

(5) Upon approval of the plan, such plan shall be deemed to be an approved management program for the purposes of section 319(h) of this Act and such plan shall be deemed to be an approved comprehensive conservation and management plan pursuant to section 320 of this Act for the purposes of funding eligibility under title VI of this Act.

(f) GRANT ASSISTANCE.—(1) The Administrator may, in consultation with the Management Conference, make grants to State, interstate, and regional water pollution control agencies, and public or nonprofit agencies, institutions, and organizations.

(2) Grants under this subsection shall be made for assisting research, surveys, studies, and modeling and technical and supporting work necessary for the development of the Plan and for retaining expert consultants in support of litigation undertaken by the State of New York and the State of Vermont to compel cleanup or obtain cleanup damage costs from persons responsible for pollution of Lake Champlain.

(3) The amount of grants to any person under this subsection for a fiscal year shall not exceed 75 per centum of the costs of such research, survey, study and work and shall be made available on the condition that non-Federal share of such costs are provided from non-Federal sources.

(4) The Administrator may establish such requirements for the administration of grants as he determines to be appropriate.

(g) DEFINITION.—For the purposes of this section, the term 'Lake Champlain drainage basin' means all or part of Clinton, Franklin, Warren, Essex, and Washington counties in the State of New York and all or part of Franklin, Grand Isle, Chittenden, Addison, Rutland, Lamoille, Orange, Washington, Orleans, and Caledonia counties in Vermont that contain all of the streams, rivers, lakes, and other bodies of water, including wetlands, that drain into Lake Champlain.

(h) STATUTORY INTERPRETATION.—Nothing in this section shall be construed so as to affect the jurisdiction or powers of—

(1) any department or agency of the Federal Government or any State government; or

(2) any international organization or entity related to Lake Champlain created by treaty or memorandum to which the United States is a signatory.

(i) AUTHORIZATION.—There are authorized to be appropriated to the Environmental Protection Agency to carry out this section \$2,000,000 for each of fiscal years 1991, 1992, 1993, 1994, and 1995.

#### ONONDAGA LAKE MANAGEMENT CONFERENCE

SEC. 121. (a) The Assistant Secretary of the Army for Civil Works, the Administrator, and the Governor of the State of New York,



acting jointly, shall convene a management conference for the restoration, conservation, and management of Onondaga Lake. The purpose of the management conference shall include but not be limited to—

(1) developing, within one-year following the date of the enactment of this Act, a comprehensive restoration, conservation, and management plan that recommends priority corrective actions and compliance schedules for the cleanup of Onondaga Lake; and

(2) coordinating implementation of the plan by the State of New York, the Army Corps of Engineers, the Environmental Protection Agency and all local agencies, governments, and other groups participating in the conference.

(b)(1) The members of the management conference shall include, at a minimum, the Assistant Secretary of the Army for Civil Works, the Administrator of the Environmental Protection Agency, the Governor of the State of New York, and a representative of—

(A) the Attorney General of the State of New York;

(B) Onondaga County, New York;

(C) The City of Syracuse, New York;

(2) The members of the management conference may designate a permanent representative to attend meetings of the management conference and otherwise represent and vote on their behalf on the management conference.

(3) The management conference shall include the following ex officio members:

(A) the United States Senators from the State of New York; and

(B) the member(s) of the United States House of Representatives within whose congressional district(s) lies Onondaga Lake.

(4) There shall be two standing committees of the management conference:

(A) the Citizens Advisory Committee; and

(B) the Technical Review Committee.

(c)(1) Not later than one hundred and twenty days after the completion of a plan and after providing for public review and comment, the assistant Secretary of the Army for Civil Works and the Administrator shall approve such plan if the plan meets the requirements of this section, and the Governor of the State of New York concurs in such approval.

(2) Upon approval of the plan under this section, such plan shall be implemented.

(d)(1) The Administrator or the Assistant Secretary of the Army for Civil Works in consultation with the management conference and the Governor of the State of New York, is authorized to make grants to the State of New York and public or nonprofit private agencies, institutions, organizations, and individuals.

(2) Grants under this subsection may be made for—

(A) research, surveys, and studies necessary for the development of the plan under this section, except that grants to any person under this paragraph shall not exceed 70 per centum of the costs of such work and that the non-Federal share of such costs are provided from non-Federal sources:



(B) conducting activities identified in the plan developed pursuant to this section, except that grants to any person under this paragraph year shall not exceed 70 per centum of the costs of such work and that the non-Federal share of such costs are provided from non-Federal sources; and

(C) gathering data and retaining expert consultants in support of litigation undertaken by the State of New York to compel clean up or obtain clean up and damage cost from parties responsible for the pollution of Onondaga Lake.

(3) In-kind payments shall qualify for the purpose of meeting the non-Federal matching requirements of this subsection.

(e) There are authorized to be appropriated to the Assistant Secretary of the Army for Civil Works and the Administrator of the Environmental Protection Agency such sums as may be necessary to carry out this section.

## TITLE II—GRANTS FOR CONSTRUCTION OF TREATMENT WORKS

\* \* \* \* \*

### ALLOTMENT

SEC. 205. (a) \* \* \*

\* \* \* \* \*

#### (1) MARINE ESTUARY RESERVATION.—

##### (1) RESERVATION OF FUNDS.—

(A) GENERAL RULE.—Prior to making allotments among the States under subsection (c) of this section, the Administrator shall reserve funds from sums appropriated pursuant to sections 207 and 607 for each fiscal year beginning after September 30, 1986.

(B) FISCAL YEARS 1987 AND 1988.—For each of fiscal years 1987 and 1988 the reservation shall be 1 percent of the sums appropriated pursuant to section 207 for such fiscal year.

(C) FISCAL YEARS 1989 AND 1990.—For each of fiscal years 1989 and 1990 the reservation shall be 1½ percent of the funds appropriated pursuant to section 207 for such fiscal year.

(D) FISCAL YEARS 1991, 1992, 1993, AND 1994.—For each of fiscal years 1991, 1992, 1993, and 1994 the reservation shall be 1 percent of the funds appropriated pursuant to section 607 for each such fiscal year.

(2) USE OF FUNDS.—Of the sums reserved under subparagraphs (A), (B), and (C) of paragraph (1) of this subsection, two-thirds shall be available to address water quality problems of marine bays and estuaries subject to lower levels of water quality due to the impacts of discharges from combined storm water and sanitary sewer overflows from adjacent urban complexes, and one-third shall be available for the implementation of section 320 of this Act, relating to the national estuary program. Sums reserved under subparagraphs (A) and (D) of paragraph (1) of this subsection shall be available to assist States in

*development of inventories of combined stormwater and sanitary sewer overflows pursuant to subsection 406(a) of this Act, and to assist municipalities in the development of overflow elimination programs pursuant to subsection 406(b) of this Act, and to provide funds necessary to assure the completion of any combined stormwater and sanitary sewer overflow project funded pursuant to this section in a preceding year. The Administrator shall allocate available funds to address the most significant water quality problems and shall give priority to municipalities discharging to waters designated pursuant to subsection 304(n) of this Act. The amount of grants to a State or municipality under this paragraph for a fiscal year shall not exceed 55 per centum of the costs of any inventory or program and shall be made on the condition that the non-Federal share of such costs are provided from non-Federal sources.*

(3) **PERIOD OF AVAILABILITY.**—Sums reserved under this subsection shall be subject to the period of availability for obligation established by subsection (d) of this section.

(4) **TREATMENT OF CERTAIN BODY OF WATER.**—For purposes of this section and section 201(n), Newark Bay, New Jersey, and the portion of the Passaic River up to Little Falls, in the vicinity of Beatties Dam, shall be treated as a marine bay and estuary.

\* \* \* \* \*

### TITLE III—STANDARDS AND ENFORCEMENT

#### EFFLUENT LIMITATIONS

SEC. 301. (a) Except as in compliance with this section and sections 302, 306, 307, 318, 402, 403, and 404 of this Act, the discharge of any pollutant by any person shall be unlawful.

\* \* \* \* \*

#### WATER QUALITY RELATED EFFLUENT LIMITATIONS

SEC. 302. (a) Whenever, in the judgment of the Administrator, or as identified under section 304(l) or section 303(i), discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 301(b)(2) of this Act, would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.

\* \* \* \* \*

## WATER QUALITY STANDARDS AND IMPLEMENTATION PLANS

## SEC. 303. (a)(1) \* \* \*

\* \* \* \* \*

## (i) MARINE WATER QUALITY AND SEDIMENT QUALITY STANDARDS.—

(1) *Each State bordering on maine waters shall promulgate numerical standards for marine water quality and marine sediment quality which shall assure the protection of shellfish, fish, and wildlife, and provide for recreational activities in and on the water.*

(2) *Each State bordering on marine waters, shall, within two years of the date of publication of criteria and information pursuant to section 304(a) of this Act for marine water quality and sediment, or in the case of marine water quality or sediment criteria published on the date of enactment of this subsection within two years of such date, establish standards pursuant to this section for such pollutants which are adequate to assure attainment of the uses identified in paragraph (1) of this section.*

(3) *If a State bordering on marine waters fails, within two years of publication of any criteria, to adopt a numerical standard pursuant to this subsection, the Administrator shall establish a numerical standard for such waters and sediment not later than the end of such two-year period.*

(4) *Any standard adopted by a State pursuant to the authorities of this Act shall have precedence in application to all activities and authorities pursuant to this Act, unless the standard adopted pursuant to paragraph (3) of this subsection is more stringent or protective of human health and the environment than the standard adopted by the State, in which case the standard adopted pursuant to paragraph (3) of this subsection shall apply.*

(5) *The Governor of any State may petition the Administrator to establish a less stringent numerical standard than the numerical standard adopted pursuant to paragraph (3) of this subsection for the marine waters and sediment of that State. A Governor's petition shall provide evidence that the application of the less stringent numerical standard will assure a degree of protection to human health and the environment equal to that provided by the standard adopted pursuant to paragraph (3) of this subsection and that the lower numerical standard is appropriate because of significant differences in the biological, physical, and chemical characteristics of the waters and sediments in question and the marine waters and sediments of the United States. Within six months of the date of the petition, and after holding a hearing in the area of the State identified in the petition, the Administrator shall publish in the Federal Register a notice approving or disapproving the petition and providing an explanation of such action.*

(6) *The Administrator shall promulgate water quality and sediment standards for areas of the marine environment not under the control of any State.*

## INFORMATION AND GUIDELINES

SEC. 304. (a)(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) criteria for water quality, *including criteria for marine water quality and marine sediment quality* accurately reflecting the latest scientific knowledge (A) of the kind and extent of all identifiable effects on health and welfare, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersal of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the effects of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters.

\* \* \* \* \*

(9)(A) *Within twelve months of enactment of this paragraph, the Administrator shall submit a plan to the Senate Committee on Environment and Public Works, the House Committee on Public Works and Transportation, and the House Committee on Merchant Marine and Fisheries a five-year plan and schedule for the development, review, and where appropriate, revision of criteria for pollutants found in marine waters and sediment.*

(B) *Such plan shall assure that criteria for such pollutants are published as expeditiously as practicable and shall give priority to pollutants which pose the greatest threat to the marine environment. The Administrator shall consult with the Under Secretary and the Governors of interested States in developing the plan. The Administrator shall also consider the contaminants identified in lists submitted pursuant to section 304(l) and data submitted pursuant to section 313 of the Superfund Amendments and Reauthorization Act of 1986 and the Marine Environment Toxics Release Inventory Assessment prepared pursuant to section 321 of this Act.*

(C) *In addition to development of contaminant specific criteria, the plan shall provide for publication, within two years of the date of enactment of this paragraph, of biological toxicity criteria for marine waters and sediments that will provide a reliable complement to pollutant specific criteria.*

(10) *In the case of a pollutant for which criteria and information under section 304(a) have not been published, any person may petition the Administrator to develop and publish such criteria for marine waters and sediments. Any petitioner shall provide evidence of the negative effect of the pollutant on the marine environment. The Administrator shall approve the petition if he determines that the pollutant is preventing the attainment of a balanced, indigenous population of fish, shellfish, and wildlife or preventing recreational activities in and on the marine waters. Within six months of the receipt of a petition, the Administrator shall publish a notice in the Federal Register approving or denying the petition. If the Administrator fails to announce a decision pursuant to this paragraph, such*

*petition shall be deemed approved. In the case of approval of a petition pursuant to this paragraph, the Administrator shall, as expeditiously as practicable, consistent with the plan pursuant to this subsection, publish criteria in formation for such pollutant pursuant to this section.*

*(11) In the case of any pollutant for which criteria and information are published on the date of enactment of this paragraph, the Administrator shall, within two years of the date of enactment of this paragraph, revise and republish such criteria and information as necessary to assure that such criteria and information address marine waters and sediments to an extent adequate for development of sediment standards pursuant to section 303(i) of this Act. Criteria and information concerning marine sediment shall be comprehensive and comparable to criteria and information and concerning water quality.*

*(12) After the date of enactment of this paragraph, the Administrator shall provide that any criteria and information published pursuant to this section shall address the quality of marine waters and sediments to an extent adequate for development of standards pursuant to section 303(i) of this Act.*

\* \* \* \* \*

(d)(1) \* \* \*

\* \* \* \* \*

*(5) The Administrator, after consultation with appropriate Federal agencies and other interested persons, shall publish within eighteen months of the date of enactment of this paragraph information supplementing the information published pursuant to paragraph (1) and establishing the degree of percentage removal attainable through the application of secondary treatment where a treatment works receives flows from combined sanitary and storm water sewers.*

\* \* \* \* \*

*(n) DESIGNATION OF PRIORITY MARINE WATERS.—*

*(1) The Administrator shall, within twelve months of the date of enactment of this Act and biennially thereafter, identify and designate, pursuant to this section, all marine water bodies which do not assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allow for recreational activities, in and on the water.*

*(2) In selection of marine water bodies pursuant to paragraph (1), the Administrator shall consider—*

*(A) the extent and seriousness of water quality contamination, including information provided in the national toxics release inventory established pursuant to section 313 of the Superfund Amendments and Reauthorization Act of 1986 and the assessment development pursuant to section 321 of this Act;*

*(B) waters identified pursuant to section 304(l) of this Act;*

*(C) the presence of toxic or other contaminants in sediment and the potential for migration of such contamination to water or aquatic organisms;*



(D) the condition of aquatic life and related habitat, including the presence of threatened or endangered species;

(E) an assessment of the likely effect of contaminants on human health, aquatic life, and related habitat, recreational and commercial opportunities, and marine ecological values;

(F) the presence of floatables in the area which are adversely affecting commercial and recreational opportunities; and

(G) anticipated total increases in pollution loadings and floatables in the area.

(3) In designation of marine waterbodies pursuant to paragraph (1), the Administrator should give priority to waterbodies which—

(A) function as an ecological system, such as a bay, estuary or sound;

(B) exhibit a range of degradation problems, such as conventional and toxic water pollution, sediment contamination, floatables, and threats to marine life and habitat; and

(C) are degraded by various pollution sources, such as industrial and municipal point sources of pollution, nonpoint pollution, and contaminants in sediment.

(4) In designation of marine waters pursuant to paragraph (1), the Administrator shall provide for public review and comment and shall, throughout the designation process, consult with States and the Under Secretary.

(5) In the case of any waterbody designated pursuant to this subsection, the Administration, or with respect to subparagraphs (A) and (B) in the case of a State authorized to issue permits under section 402 of this Act, the State, shall—

(A) notwithstanding the discretionary authority provided in section 403(a)(2) exercise authorities concerning point source discharges to marine waters pursuant to section 403 of this Act;

(B) notwithstanding the schedules established pursuant to section 402(p)(4) and consistent with the requirements of section 402(p)(2), within one year of designation, issue permits for industrial and municipal discharges of stormwater to such waters, consistent with the requirements of section 402(p)(3) of this Act;

(C) within one hundred and eighty days of designation, consider pursuant to section 404(c) of this Act, prohibiting the specification of an area designated pursuant to this section as a disposal site and denying or restricting the use of any area designated pursuant to this section as a disposal site;

(D) exercise authorities concerning prohibition of discharges of sewage from vessels pursuant to section 312 of this Act;

(E) require that each publicly owned treatment work discharging to such waters which serves one or more significant industrial user, as defined by the Administrator, regardless of the volume of such discharge of population served by the treatment works, shall develop and enforce

programs for the pretreatment of industrial wastes pursuant to section 307(b) of this Act; and

(F) in the case of a State that does not have an approved assessment and/or management program for the affected waterbody that complies with sections 319 (a) and (b) of this Act, conduct an assessment and prepare a management program for the watershed of such waters within eighteen months of the date of enactment.

(6) The Administrator may, after consultation with States and after providing for public review and comment, de-designate a marine waterbody designated pursuant to this subsection based on a determination that the environmental quality of the waterbody is restored and that the waterbody will assure the protection and propagation of a balanced indigenous population of fish, shellfish, and wildlife and will provide for recreational activities, in and on the water on a continuing basis.

\* \* \* \* \*

#### TOXIC AND PRETREATMENT EFFLUENT STANDARDS

##### SEC. 307. (a)(1) \* \* \*

\* \* \* \* \*

(f)(1) Any publicly owned treatment work discharging to a waterbody designated pursuant to section 304(n) which serves one or more industrial users, as defined by the Administrator, of this Act shall establish or revise its pretreatment program within one year of the date of such designation consistent with the requirements of this section and paragraph (2) of this subsection.

(2) A pretreatment program required by paragraph (1) of this subsection shall, at a minimum, include the following requirements—

(A) individual discharge permits for industrial discharges into the publicly owned treatment works;

(B) additional or revised local limits to control the discharge of toxic pollutants into publicly owned treatment works;

(C) random sampling and/or inspection of industrial users;

(D) development of enforcement response plans;

(E) notification by industrial users of any discharge into the publicly owned treatment works of a substance which is a listed or characteristic waste under section 3001 of the Resource Conservation and Recovery Act; and

(F) notification by industrial users in advance of any substantial change in the volume or character of pollutants in their discharge.

(3) Nothing in this subsection shall relieve or reduce the obligations of any person to comply with requirements established under this Act.

(g)(1) The Administrator shall develop and test guidelines for publicly owned treatment works to identify, reduce, and control, the sources of toxic pollutants found in waste waters.

(2) The Administrator shall establish a data base of sources of toxic pollutants in waste water which have been identified by publicly owned treatment works.

\* \* \* \* \*

## MARINE SANITATION DEVICES

SEC. 312. (a) \* \* \*

\* \* \* \* \*

(f)(1)(A) \* \* \*

\* \* \* \* \*

(4)(A) If the Administrator determines upon application by a State that the protection and enhancement of the quality of specified waters within such State requires such a prohibition, he shall by regulation completely prohibit the discharge from a vessel of any sewage (whether treated or not) into such waters.

(B) Upon application by a State, the Administrator shall, by regulation, establish a drinking water intake zone in any waters within such State and prohibit the discharge of sewage from vessels within that zone.

(C) *In the case of any waterbodies designated pursuant to subsection 304(n) of this Act, the Administrator shall within eighteen months of such designation, by regulation completely prohibit the discharge from a vessel of sewage (whether or not) into such waters.*

\* \* \* \* \*

(j) Any person who violates subsection (g)(1) of this section or clause (1) or (2) of subsection (h) of this section *or any prohibition established pursuant to paragraphs (f) (3) or (4) of this section* shall be liable to a civil penalty of not more than \$5,000 for each violation. Any person who violates clause (4) of subsection (h) of this section or any regulation issued pursuant to this section shall be liable to a civil penalty of not more than \$2,000 for each violation. Each violation shall be a separate offense. The Secretary of the department in which the Coast Guard is operating may assess and compromise any such penalty. No penalty shall be assessed until the person charged shall have been given notice and an opportunity for a hearing on such charge. In determining the amount of the penalty, or the amount agreed upon in compromise, the gravity of the violation, and the demonstrated good faith of the person charged in attempting to achieve rapid compliance, after notification of a violation, shall be considered by said Secretary.

\* \* \* \* \*

(n) *The Administrator, after consultation with the Secretary of the Department in which the Coast Guard is operating, shall conduct a study to determine the availability of adequate facilities for the safe and sanitary removal and treatment of sewage from vessels operating on coastal waters and measures to assure use of such facilities. Within two years of the date of enactment of this subsection, the Administrator shall report to the Congress the results of such study and shall make recommendations concerning specific actions, including amendments to this Act, as are necessary to assure that adequate facilities for the safe and sanitary removal and treatment of sewage from vessels operating on coastal waters are reasonably available within a three-year period.*

\* \* \* \* \*

## CLEAN LAKES

SEC. 314. (a) \* \* \*

(d) DEMONSTRATION PROGRAM.—

(1) GENERAL REQUIREMENTS. \* \* \*

(2) GEOGRAPHICAL REQUIREMENTS.—Demonstration projects authorized by this subsection shall be undertaken to reflect a variety of geographical and environmental conditions. As a priority, the Administrator shall undertake demonstration projects at *Lake Champlain, New York and Vermont*; Lake Houston, Texas; Beaver Lake, Arkansas; Greenwood Lake and Belcher Creek, New Jersey; Deal Lake, New Jersey; Alcyon Lake, New Jersey; Gorton's Pond, Rhode Island; Lake Washington, Rhode Island; Lake Bomoseen, Vermont; Sauk Lake, Minnesota; and Lake Worth, Texas.

## SEC. 319. NONPOINT SOURCE MANAGEMENT PROGRAMS.

(a) STATE ASSESSMENT REPORTS.— \* \* \*

(e) LOCAL MANAGEMENT PROGRAMS; TECHNICAL ASSISTANCE.—If a State fails to submit a management program under subsection (b) or the Administrator does not approve such a management program, a local public agency or organization which has expertise in, and authority to, control water pollution resulting from nonpoint sources in any area of such State which the Administrator determines is of sufficient geographic size may, with approval of such State, request the Administrator to provide, and the Administrator shall provide, technical assistance to such agency or organization in developing for such area a management program which is described in subsection (b) and can be approved pursuant to subsection (d). After development of such management program, such agency or organization shall submit such management program to the Administrator for approval. If the Administrator approves such management program, such agency or organization shall be eligible to receive financial assistance under subsection (h) for implementation of such management program as if such agency or organization were a State for which a report submitted under subsection (a) and a management program submitted under subsection (b) were approved under this section. Such financial assistance shall be subject to the same terms and conditions as assistance provided to a State under subsection (h). *Beginning on August 4, 1989, in the case where a State has failed to submit a management program under subsection (b) or the Administrator does not approve such a management program for a watershed of coastal waters, a local public agency or organization may act pursuant to this subsection regardless of the views of the applicable State.*

(k)(1) CONSISTENCY OF OTHER PROGRAMS AND PROJECTS WITH MANAGEMENT PROGRAMS.—The Administrator shall transmit to the Office of Management and Budget and the appropriate Federal

departments and agencies a list of those assistance programs and development projects identified by each State under subsection (b)(2)(F) for which individual assistance applications and projects will be reviewed pursuant to the procedures set forth in Executive Order 12372 as in effect on September 17, 1983. Beginning not later than sixty days after receiving notification by the Administrator, each Federal department and agency shall modify existing regulations to allow States to review individual development projects and assistance applications under the identified Federal assistance programs and shall accommodate, according to the requirements and definitions of Executive Order 12372, as in effect on September 17, 1983, the concerns of the State regarding the consistency of such applications or projects with the State nonpoint source pollution management program.

(2)(A) *The Administrator shall provide technical assistance to the Secretary of Agriculture in utilizing the Secretary's authorities to reduce agricultural and related sources of nonpoint source pollution to coastal waters, consistent with subtitle D of title 12 of the Food Security Act (16 U.S.C. 3831-3836).*

(B) *Within twelve months of the date of enactment of this paragraph, and annually thereafter, the Administrator shall identify, based on the assessment reports submitted by the States and approved by the Administrator or developed by the Administrator for the States pursuant to subsections (a), (d), and (e) of this section, and such other information as is available to the Administrator, those lands which, if enrolled in the Conservation Reserve Program, would contribute to the protection of the coastal environment by reducing non-point source pollution. Where appropriate, the lands identified may include lands that are not erodible but that pose an off-farm environmental threat, pursuant to section 1231(c)(2) of the Food Security Act (16 U.S.C. 3831(c)(2)).*

(C) *The Administrator shall furnish the list of such identified lands to the Secretary of Agriculture for purposes of assisting the Secretary in establishing priorities for expenditures under the Conservation Reserve Program and shall make such lists available to the States and the public.*

(D) *The Secretary shall provide the Administrator within six months of receiving the Administrator's list with a report describing the actions the Secretary will take to respond to the list. The Secretary shall provide a detailed explanation of any recommendation made by the Administrator which the Secretary will not implement.*

\* \* \* \* \*

#### SEC. 320. NATIONAL ESTUARY PROGRAM.

##### (a) MANAGEMENT CONFERENCE.— \* \* \*

###### (1) \* \* \*

\* \* \* \* \*

###### (2) CONVENING OF CONFERENCE.—

(A) **IN GENERAL.**—In any case where the Administrator determines, on his own initiative or upon nomination of a State under paragraph (1), that the attainment or maintenance of that water quality in an estuary which assures protection of public water supplies and the protection and



propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on the water, requires the control of point and non-point sources of pollution to supplement existing controls of pollution in more than one State, the Administrator shall select such estuary and convene a management conference. *Beginning one year after the date of enactment of section 304(n) of this Act, the Administrator may not convene a management conference pursuant to this section for any estuary which is not designated pursuant to section 304(n) of this Act.*

(B) PRIORITY CONSIDERATION.—The Administrator shall give priority consideration under this section to Long Island Sound, New York and Connecticut; Narragansett Bay, Rhode Island; Buzzards Bay, Massachusetts; *Casco Bay, Maine; Tampa Bay, Florida; Lower St. Johns River, Florida; Puget Sound, Washington; New York-New Jersey Harbor, New York and New Jersey; Delaware Bay, Delaware and New Jersey; Delaware Inland Bays, Delaware; Albemarle Sound, North Carolina; Sarasota Bay, Florida; San Francisco Bay, California; and Galveston Bay, Texas.*

\* \* \* \* \*

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator not to exceed **[\$12,000,000]** *\$25,000,000* per fiscal year for each of fiscal years 1987, 1988, 1990, **[and 1991]** *1991, 1992, 1993, and 1994* for—

(1) expenses related to the administration of management conferences under this section, not to exceed 10 percent of the amount appropriated under this subsection;

(2) making grants under subsection (g); and

(3) monitoring the implementation of a conservation and management plan by the management conference or by the Administrator, in any case in which the conference has been terminated.

The Administrator shall provide up to \$5,000,000 per fiscal year of the sums authorized to be appropriated under this subsection to the Administrator of the National Oceanic and Atmospheric Administration to carry out subsection (j).

(j) RESEARCH.—

**[(1) PROGRAMS.]**—In order to determine the need to convene a management conference under this section or at the request of such a management conference, the Administrator shall coordinate and implement, through the National Marine Pollution Program Office and the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration, as appropriate, for one or more estuarine zones—

**[(A)]** a long-term program of trend assessment monitoring measuring variations in pollutant concentrations, marine ecology, and other physical or biological environmental parameters which may affect estuarine zones, to provide the Administrator the capacity to determine the potential and actual effects of alternative management strategies and measures;

[(B) a program of ecosystem assessment assisting in the development of (i) baseline studies which determine the state of estuarine zones and the effects of natural and anthropogenic changes, and (ii) predictive models capable of translating information on specific discharges or general pollutant loadings within estuarine zones into a set of probable effects on such zones;

[(C) a comprehensive water quality sampling program for the continuous monitoring of nutrients, chlorine, acid precipitation dissolved oxygen, and potentially toxic pollutants (including organic chemicals and metals) in estuarine zones, after consultation with interested State, local, interstate, or international agencies and review and analysis of all environmental sampling data presently collected from estuarine zones; and

[(D) a program of research to identify the movements of nutrients, sediments and pollutants through estuarine zones and the impact of nutrients, sediments, and pollutants on water quality, the ecosystem, and designated or potential uses of the estuarine zones.]

(1) *The Administrator, in cooperation with the management conference and with affected States, may develop and implement—*

(A) *a program of monitoring to determine variations in pollutant concentrations, marine ecology, and other physical or biological environmental parameters which may affect the estuary, and to determine the potential and actual effects of alternative management strategies and measures;*

(B) *a program of ecosystem assessment assisting in the development of (i) baseline studies which determine the biological conditions in the estuary and the effects of natural and anthropogenic changes, and (ii) predictive models capable of translating information on specific discharges or general pollutant loadings within the waterbody into a set of probable effects on biological conditions in such water bodies;*

(C) *a comprehensive water quality and sediment sampling program for the periodic monitoring of the chemical conditions in the estuary (including nutrients, chlorine, atmospheric deposition, dissolved oxygen, organic chemicals, metals and other toxic pollutants); and*

(D) *a program of research to identify the movements of nutrients, sediments, and pollutants through the estuary and the impact of nutrients, sediments, and pollutants on water quality and designated or potential uses of such waters.*

[(2) **REPORT.**—The Administrator, in cooperation with the Administrator of the National Oceanic and Atmospheric Administration, shall submit to the Congress no less often than biennially a comprehensive report on the activities authorized under this subsection including—

[(A) a listing of priority monitoring and research needs;

[(B) an assessment of the state and health of the Nation's estuarine zones, to the extent evaluated under this subsection;

[(C) a discussion of pollution problems and trends in pollutant concentrations with a direct or indirect effect on water quality, the ecosystem, and designated or potential uses of each estuarine zone, to the extent evaluated under this subsection; and

[(D) an evaluation of pollution abatement activities and management measures so far implemented to determine the degree of improvement toward the objective expressed in subsection (b)(4) of this section.]

(k)(1) *The Administrator, shall submit to the Congress, within eighteen months of the date of enactment of this subsection and biennially thereafter, a comprehensive report on the activities authorized by this section including—*

*(A) a listing of estuaries considered for action pursuant to this section;*

*(B) a list and description of the estuaries considered and selected for management conferences pursuant to this section;*

*(C) an evaluation of the research, monitoring, and pollution abatement measures implemented pursuant to this section; and*

*(D) an assessment and description of the management conferences in progress and a report on the implementation of conservation and management plans.*

(2) *The Administrator shall include in the report pursuant to this subsection a listing of waters designated pursuant to subsection 304(n) of this Act, a description of the measures taken to restore the quality of such waters, and recommendations concerning additional protective measures.*

**[k]** (l) **DEFINITIONS.**—For purposes of this section, the terms “estuary” and “estuarine zone” have the meanings such terms have in section 104(n)(4) of this Act, except that the term “estuarine zone” shall also include associated aquatic ecosystems and those portions of tributaries draining into the estuary up to the historic height of migration of anadromous fish or the historic head of tidal influence, whichever is higher.

**SEC. 321. COASTAL ENVIRONMENT TOXICS RELEASE STRATEGY.**—(a) *Within twelve months of the date of enactment of this section, the Administrator shall prepare and submit to the Congress a Coastal Environment Toxics Release Strategy. The strategy shall contain the Administration's plan for using the information in reports pursuant to section 313 of the Superfund Amendments and Reauthorization Act to improve the Agency's programs for the coastal environment.*

(b) *The Administrator shall annually prepare an assessment containing a summary and analysis of the industrial categories discharging pollutants required to be reported pursuant to section 313 of the Superfund Amendments and Reauthorization Act of 1986 into coastal waters and into publicly owned treatment works which discharge into such waters. The assessment shall identify those industrial categories which discharge the greatest amount of pollutants and the greatest amount of the most toxic pollutants on the Inventory. The assessment also shall identify geographical areas receiving the greatest amount of discharges from such pollutants. The*

assessment may be included in reports published pursuant to section 313 of the Superfund Amendments and Reauthorization Act.

(c) The Administrator shall use information in the assessment to—

(1) verify information in permits issued by the Administrator or the State, as the case may be, pursuant to section 402 of this Act;

(2) improve the program of individual control strategies for toxic pollutants established pursuant to section 304(1) of this Act;

(3) identify other regulatory programs, including programs established pursuant to sections 301, 302, 303, 304, 306, and 307 of this Act, and adopt measures to assure that toxics data is incorporated into those programs;

(4) identify pollutants for which water quality criteria have not been published; and

(5) target compliance and enforcement actions.

## TITLE IV—PERMITS AND LICENSES

### CERTIFICATION

#### SEC. 401. (a)(1) \* \* \*

\* \* \* \* \*

(e)(1) Any local government participating in the National Flood Insurance Program on the date of enactment of this subsection shall, within three years of the date of enactment of this subsection and every five years thereafter, provide to the Federal Emergency Management Agency a certification from the State in which such local government is located that there are in place enforceable requirements with regard to new construction in the designated hundred-year flood plain associated with marine waters which are adequate to assure that such new construction will not cause or contribute to the violation of State water quality standards adopted pursuant to section 303(i) of this Act.

(2) Any local government which is not participating in the National Flood Insurance Program on the date of enactment of this subsection, shall, as a condition of participation in the program, provide to the Federal Emergency Management Agency as part of its original application and every five years thereafter, a certification from the State in which such local government is located that there are in place enforceable requirements with regard to new construction in the designated flood plain which are adequate to assure that such new construction will not cause or contribute to the violation of State water quality standards adopted pursuant to section 303(i) of this Act.

(3) If a community fails to provide the certification required pursuant to paragraph (1) of this subsection, the Director of the Federal Emergency Management Agency shall issue a notice of intention to suspend the community from the flood insurance program within 90 days. If the community fails to provide the required certification by the close of the notice period, the Director shall suspend the community from the program until such time as the required certification is provided.

(4) If a State fails to act on a request from a local government for certification pursuant to this subsection within one year after receipt of such request, the certification requirements of this subsection shall be waived.

(5) The certification required pursuant to this subsection shall be provided by the State agency which provides certifications pursuant to section (a) of this section.

(6) For the purposes of this subsection, the phrase "suspend the community" means that no new Federal flood insurance policies may be issued in such community, that no existing policies may be renewed after their termination date, and that any existing policies will remain in full effect until their termination date.

\* \* \* \* \*

#### OCEAN DISCHARGE CRITERIA

SEC. 403. [(a) No permit under section 402 of this Act for a discharge into the territorial sea, the waters of the contiguous zone, or the oceans shall be issued, after promulgation of guidelines established under subsection (c) of this section, except in compliance with such guidelines. Prior to the promulgation of such guidelines, a permit may be issued under such section 402 if the Administrator determines it to be in the public interest.]

(a) OCEAN DISCHARGE CRITERIA.—(1) In addition to any other requirements of this Act, no permit shall be issued under section 402 of this Act for a discharge into the territorial sea, the waters of the contiguous zone, or the oceans if the Administrator finds, based on an assessment of the criteria provided in subsection (c) and (d), that the discharge can reasonably be expected to prevent the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife and not provide for recreational activity in and on the water or that the discharge can reasonably be expected to prevent the attainment of standards established pursuant to section 303 of this Act.

(2) The Administrator may, in response to a request for a permit pursuant to section 402 of this Act for a discharge to estuarine waters, apply the criteria provided in subsections (c) and (d) of this section in considering such permit request. The Administrator shall not issue a permit if, based on such assessment, such discharge can reasonably be expected to prevent the protection and propagation of a balanced indigenous population of such, shellfish, and wildlife and not provide for recreational activities in and on the water or the discharge can reasonably be expected to prevent the attainment of standards established pursuant to section 303 of this Act.

(b) The requirements of subsection (d) of section 402 of this Act may not be waived in the case of permits for discharges into the territorial sea.

(c)(1) The Administrator shall, within one hundred and eighty days after enactment of this Act (and from time to time thereafter), promulgate guidelines for determining the degradation of the waters of the territorial seas, the contiguous zone, and the oceans, which shall include:



(A) the effect of disposal of pollutants on human health or welfare, including but not limited to plankton, fish, shellfish, wildlife, shorelines, and beaches;

(B) the effect of disposal of pollutants on marine life including the transfer, concentration, and dispersal of pollutants or their byproducts through biological, physical, and chemical processes; changes in marine ecosystem diversity, productivity, and stability; and species and community population changes;

(C) the effect of disposal, of pollutants on esthetic, and recreation, and economic values;

(D) the persistence and permanence of the effects of disposal of pollutants;

(E) the effect of the disposal at varying rates, of particular volumes and concentrations of pollutants;

(F) other possible locations and methods of disposal or recycling of pollutants including land-based alternatives; and

(G) the effect on alternate uses of the oceans, such as mineral exploitation and scientific study.

(2) In any event where insufficient information exists on any proposed discharge to make a reasonable judgment on any of the guidelines established pursuant to this subsection no permit shall be issued under section 402 of this Act. *Any existing or proposed regulations creating exemptions to the limitations of this paragraph are herewith deemed invalid.*

*(d)(1) In assessing the effects of a proposed discharge to marine waters, the Administrator shall consider, in addition to the criteria established pursuant to subsection (c) of this section, the demonstration by the applicant of a need to discharge based on a showing of the full utilization of measures, processes, methods, systems, or techniques to eliminate the discharge altogether or minimize the volume and amounts of such pollutants through process changes, substitution of material, enclosure of systems, or other modifications.*

*(2) The Administrator shall, within one year of the date of enactment of this paragraph, publish guidance describing pollution prevention methods and describing the Agency's expectations with regard to the demonstrations required of paragraph (1) of this subsection.*

\* \* \* \* \*

#### SEC. 406. COASTAL COMBINED SEWER OVERFLOWS.

*(a) COASTAL COMBINED SEWER OPERATIONS INVENTORY.—Each State in which there are discharges of overflows from combined storm water sewers and sanitary sewers into coastal waters shall, within twelve months of the date of enactment of this section and biennially thereafter, prepare and submit to the Administrator an inventory of all such discharges in the State which shall include—*

*(A) identification of the location of each such discharge, and the waterbody affected;*

*(B) identification of the municipal or other entity responsible for the discharge;*

*(C) identification of any permit for each such discharge pursuant to section 402 of this Act, including the compliance status of the permit;*

(D) identification of the estimated volume of discharge over a one-year period and the estimated pollutant loading of the discharge over such period, including any pollutants introduced by an industrial discharger;

(E) assessment of the proportion of the volume of the combined discharge to the volume capacity of the appropriate treatment works over the maximum measured or estimated storm event that would occur as a result of a one-year/six hour storm event.

(F) the nature and status of any existing programs to eliminate such discharges.

(b) **COMBINED SEWER OVERFLOW ELIMINATION PROGRAMS.—**

(1) Any municipality or other entity listed pursuant to paragraph (B) of subsection (a)(1) of this section shall develop and submit to the Administrator a program and schedule for the elimination of all discharges listed pursuant to paragraph (A) of subsection (a)(1).

(2) The program and schedule required pursuant to this section shall be submitted to the Administrator not later than thirty-six months after the date of enactment of this section and shall—

(A) identify system modifications, best management practices, regulatory and nonregulatory programs, and other measures to be taken by the municipality for elimination of discharges of overflows from combined sewers;

(B) identify pretreatment program modifications to reduce, to the fullest extent practicable, toxic pollution levels of any overflows;

(C) specify the controls to be applied to any overflows not eliminated;

(D) establish a schedule for development of plans and implementation of system modifications, best management practices, and other measures providing for implementation of such practices, programs, and measures at the earliest practicable date but in no case more than seven years from the date of program approval, except in the case of a waterbody designated pursuant to section 304(n) in which case such schedule shall be not less than five years;

(E) estimate the costs of design and implementation of system modifications, best management practices, programs, and other measures including the estimated financial contributions from local, State, and Federal sources; and

(F) provide for monitoring of waters to which overflows are discharged sufficient to assess water quality impacts of overflow discharges.

(3) The municipality shall provide for public review and comment on the program developed pursuant to this subsection and shall include any such comments in the plan. The municipality also shall coordinate development of the program with any management program required pursuant to section 319(b) of this Act, any Remedial Action Plan or Lakewide Management Plan pursuant to section 118 of this Act, any individual control strategy adopted pursuant to section 304(l) of this Act, and any man-

agement conference convened pursuant to section 320 of this Act.

(4) Not later than three months after the submission of a program pursuant to this subsection, the Administrator shall approve or disapprove the program. The Administrator shall approve the program only if—

(A) the program meets the requirements of subsection (b)(2) of this section;

(B) adequate authority exists and adequate financial resources are available to implement the program; and

(C) the schedule for implementation of the program is as expeditious as practicable, but in no case more than seven years from the date of program approval except in the case of a discharge to a waterbody designated pursuant to section 304(n) in which case such schedule shall be not more than five years.

(5) If the Administrator disapproves the program pursuant to this subsection, the Administrator shall notify the municipality of any revisions or modifications necessary to obtain approval. The municipality shall have three months to submit its revised plan and the Administrator shall approve or disapprove the program in three months.

(6) Any municipality required to develop a program pursuant to this section which does not have an approved program by the date forty-eight months after the date of enactment of this section or which fails to implement an approved program shall be subject to penalties pursuant to subsections (d) and (g) of section 309 of this Act.

(7) No later than five years from the date of enactment of this section, the Administrator shall modify or issue permits pursuant to section 402 of this Act for any discharge of combined sewers to coastal waters. Such permits may be issued on a system or jurisdiction wide basis and shall reflect the elimination plans developed pursuant to this subsection.

(8) Nothing in this section shall relieve any person or any municipality from liability for any existing violation of this Act, eliminate any existing duty to obtain and comply with a permit pursuant to section 402 of this Act, or reduce the obligation of any person or municipality to comply with the requirements of this Act, including standards adopted pursuant to section 303 of this Act.

(9) The Administrator may extend the compliance period established in subparagraphs (2) (D) and (4) (C) of this subsection for a period of up to two years if the Administrator determines that the applicant has made a good faith effort to comply with the plan approved pursuant to this subsection and the compliance with the plan is not feasible.

(c) COMBINED SEWER OVERFLOW ELIMINATION GUIDANCE.—

(1) Within one year from the date of enactment of this section, the Administrator shall publish guidance describing best management practices, regulatory, and nonregulatory programs, and other measures for the elimination of combined storm-water and sanitary sewer overflows including, but not limited to—

(A) implementation of domestic water conservation programs to reduce sewage influent;

(B) implementation of inflow and infiltration reduction measures;

(C) implementation of surface treatment and on-site runoff controls;

(D) implementation of requirements for volume reduction or elimination and detention during and following storm events by industrial and commercial users;

(E) implementation of storm-water best management practices, including erosion controls, street cleaning, and land use requirements and controls;

(F) separation of sewers;

(G) pretreatment program modifications;

(H) sewer system operation and construction of detention facilities for storage of combined influent prior to treatment at the publicly owned treatment works or increase in capacity of publicly owned treatment works;

(I) estimated, average design and construction schedules and costs for best management practices, programs, and other measures; and

(J) model local ordinances or regulations, including model amendments to local pretreatment programs.

(2) Any delay by the Administrator in issuing guidance under this provision shall not excuse the obligation of any municipality to comply with the requirements of this section.

(3) The Administrator shall consult with appropriate Federal Agencies, State agencies, sewage treatment agencies, public interest groups, and other interested parties in development of guidance pursuant to paragraph (1).

(d) **DEFINITIONS.**—(1) For the purposes of this section, the term "treatment work" shall be as defined in section 212(2) of this Act.

(2) For the purposes of this section, the term "limitation of all discharges" refers to measures which will, at a minimum, assure that there is no discharge during or following the maximum measured storm that would occur as a result of a one-year/six hour storm event.

## TITLE V—GENERAL PROVISIONS

### ADMINISTRATION

SEC. 501. (a) \* \* \*

### GENERAL DEFINITIONS

SEC. 502. (1) \* \* \*

\* \* \* \* \*

(20) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(21) The term "Under Secretary" means the Under Secretary of Commerce for Oceans and Atmosphere, who serves as the Administrator of the National Oceanic and Atmospheric Administration.

(22) The term "Federal agency" means any department, agency, or other instrumentality of the Federal Government, any independent

agency or establishment of the Federal Government including any Government Corporation.

(23) The terms "estuary" and "estuarine zone" have the meanings such terms have in section 104(n)(4) of this Act, except that the terms shall also include associated aquatic ecosystems and those tributaries draining into the estuary up to the historic head of tidal influence.

(24) The terms "Marine waters" and "marine waterbody" refer to estuaries, waters of the estuarine zone, including wetlands, any other water seaward of the historic height of tidal influence, the territorial seas, the contiguous zone, and the ocean.

(25) The "marine sediment" refers to sediments underlying marine water.

(26) The term "floatable" means marine debris that float or remain suspended in the water column.

(27) The term "Great Lakes" has the meaning established in subparagraph 118(a)(3)(B) of this Act.

(28) The terms "coastal water" and "coastal waterbody" refer to marine water and the Great Lakes.

\* \* \* \* \*

#### REPORTS TO CONGRESS

SEC. 516. (a) \* \* \*

(b)(1) The Administrator, in cooperation with the States, including water pollution control agencies and other water pollution control planning agencies, shall make (A) a detailed estimate of the cost of carrying out the provisions of this Act; (B) a detailed estimate, biennially revised, of the cost of construction of all needed publicly owned treatment works in all of the States and of the cost of construction of all needed publicly owned treatment works in each of the States; (C) a comprehensive study of the economic impact on affected units of government of the cost of installation of treatment facilities; and (D) a comprehensive analysis of the national requirements for and the cost of treating municipal, industrial, and other effluent to attain the water quality objectives as established by this Act or applicable State law. The Administrator shall submit such detailed estimate and such comprehensive study of such cost to the Congress no later than February 10 of each odd numbered year. Whenever the administrator, pursuant to this subsection, requests and receives an estimate of cost from a State, he shall furnish copies of such estimate together with such detailed estimate to Congress. *For the purposes of this subsection, the term "treatment works" shall include any discharges from combined storm sewers and sanitary sewers and shall reflect the data provided by States pursuant to section 406(a) this Act.*

\* \* \* \* \*

(5) the various requirements of Federal and State laws concerning land management, discharges to water, and other related activities. Information provided pursuant to this paragraph may be adjusted to apply specifically to land within a given region of the country or a given State.



(c) *STATE PARTICIPATION.*—At the request of a Governor of a State, the Administrator may delegate operation of the informational and educational program established by subsection (b) within such State to a State agency. Costs associated with activities pursuant to this section are eligible for funding under section 106 of this Act.

(d) *REGISTRY DOCUMENT.*—The Administrator shall publish on a periodic basis a National Marine Registry document identifying and summarizing land listed pursuant to this subsection and shall provide a copy to any person submitting a completed application pursuant to paragraph (1) of this subsection at no cost.

(e) *DEFINITION.*—For the purposes of this section, the term "marine land" means any property which borders on any marine waters.

\* \* \* \* \*

#### NATIONAL MARINE OUTREACH PROGRAM

*SEC. 520. (a) AUTHORITY.*—The Administrator shall establish a national program of outreach information and technical assistance for owners of marine land.

(b) The Administrator shall compile a mailing list of owners of marine land in the national registry based on submission of a completed application, in such form as the Administrator may suggest, by the property owner providing basic information concerning the property including but not limited to—

- (1) the location and size of the property;
- (2) the physical characteristics of the property;
- (3) known wildlife habitat or other significant natural features or characteristics; and
- (4) proof of ownership of the land.

Inclusion of land in the list shall be at the sole discretion of the land owner.

(c) *INFORMATION AND EDUCATION.*—The Administrator shall operate a program to provide owners of marine land with informational and educational materials concerning—

- (1) land management and related practices to prevent water pollution and protect habitat;
- (2) activities and practices to protect and foster the development of aquatic life and wildlife;
- (3) measures to preserve and protect significant natural features of land or significant natural resources;
- (4) the activities of Federal, State, and local agencies to protect marine waters including activities pursuant to sections 201, 303, 319, 320, 402, and 404 of this Act; and
- (5) the various requirements of Federal and State laws concerning land management, discharges to water, and other related activities.

Information provided pursuant to this paragraph may be adjusted to apply specifically to land within a given region of the country or a given State.

(d) *STATE PARTICIPATION.*—At the request of a Governor of a State, the Administrator may delegate operation of the informational and educational program established by subsection (b) within

such State to a State agency. Costs associated with activities pursuant to this section are eligible for funding under section 106 of this Act.

(e) *DEFINITION.*—For the purposes of this section, the term “marine land” means any property which borders on any marine waters.

*SEC. 521. FEDERAL AGENCY RESPONSIBILITIES.*—(a) *STUDY OF FEDERAL AGENCY PROGRAMS.*—(1) The Administrator of the Environmental Protection Agency, in consultation with the Administrator of the National Oceanic and Atmospheric Administration, shall conduct a comprehensive study of the policies, programs, and activities of each Federal agency that may result in degradation of coastal waters.

(2) Within two years of the enactment of this section, the Administrator shall submit to Congress a report describing the conclusions of the study and recommendations to reduce degradation of coastal waters from Federal agencies’ policies, programs, and activities. The report shall include—

(A) a comprehensive listing of each Federal agency’s policies, programs, and activities that were considered during the study to affect degradation of coastal waters;

(B) a detailed analysis of the impacts of each Federal agency’s policies, programs, and activities on degradation of coastal waters;

(C) proposed changes in each Federal agency’s policies, programs, and activities to minimize these impacts;

(D) suggested actions to be taken by other Federal or State agencies in order to better coordinate all policies, programs, and activities that affect degradation of coastal waters; and

(E) specific recommendations for further legislative actions necessary to bring each Federal agency’s policies, programs and activities into conformance with the policy of this Act.

(3) In conducting such study, the Administrator shall seek the views of States and the public on ways in which each Federal agencies’ policies, programs, and activities can be implemented to reduce degradation in coastal waters.

(b) *FEDERAL AGENCY LEADERSHIP.*—Each Federal agency shall provide leadership and take action to the extent provided by law to minimize degradation of coastal waters and to restore and preserve the natural and beneficial values served by coastal waters in carrying out its responsibilities for—

(1) acquiring, managing, and disposing of Federal lands and facilities;

(2) providing federally undertaken, financed, or assisted construction and improvements; and

(3) conducting Federal activities and programs affecting the coastal waters.

(c) *FEDERAL AGENCY RESPONSIBILITY.*—In carrying out the activities described in subsection (b), each agency has a responsibility to evaluate the potential effects of any action it may take in or which may affect coastal waters, to ensure that its planning programs and budget requests reflect of the policy of this Act.

(d) *ALTERNATIVES AND MITIGATION.*—If a Federal agency has determined to or proposed to, conduct, support or allow an action

*which may affect the coastal waters, the Federal agency shall consider alternatives to avoid adverse effects on marine waters. If the agency finds that there is no practicable alternative consistent with the law, the Federal agency shall modify its actions to the extent consistent with law to minimize the potential adverse effects on coastal waters.*

## TITLE VI—STATE WATER POLLUTION CONTROL REVOLVING FUNDS

### SEC. 601. GRANTS TO STATES FOR ESTABLISHMENT OF REVOLVING FUNDS.

(a) GENERAL AUTHORITY.—Subject to the provisions of this title, the Administrator shall make capitalization grants to each State for the purpose of establishing a water pollution control revolving fund for providing assistance (1) for construction of treatment works (as defined in section 212 of this Act) which are publicly owned, (2) for implementing a management program under section 319, and (3) **for developing and implementing a conservation and management plan under section 320.** *for developing and implementing a conservation and management plan under section 320, (4) implementing a combined storm-water and sanitary sewer elimination program under section 406(b), and (5) implementation of Great Lakes protection programs pursuant to subsection 118(c) of this Act.*

\* \* \* \* \*

### SEC. 603. WATER POLLUTION CONTROL REVOLVING LOAN FUNDS.

(a) \* \* \*

\* \* \* \* \*

(c) PROJECTS ELIGIBLE FOR ASSISTANCE.—The amounts of funds available to each State water pollution control revolving fund shall be used only for providing financial assistance (1) to any municipality, intermunicipal, interstate, or State agency for construction of publicly owned treatment works (as defined in section 212 of this Act), (2) for the implementation of a management program established under section 319 of this Act, **and** (3) for development and implementation of a conservation and management plan under section 320 of this Act, *(4) implementing a combined storm-water sewer and sanitary sewer elimination program pursuant to section 406(b), and (5) implementation of Great Lakes protection programs pursuant to subsection 118(c) of this Act.* The fund shall be established, maintained, and credited with repayments, and the fund balance shall be available in perpetuity for providing such financial assistance.

## MARINE PROTECTION AND SANCTUARIES ACT

(33 U.S.C.)

## CHAPTER 27—OCEAN DUMPING

## § 1401. Congressional finding, policy, and declaration of purpose

(a) DANGERS OF UNREGULATED DUMPING.— \* \* \*

(b) POLICY OF REGULATION AND PREVENTION OR LIMITATION.—(1) The Congress declares that it is the policy of the United States to regulate the dumping of all types of materials into ocean waters and to prevent or strictly limit the dumping into ocean waters of any material which would adversely affect human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities.

(2) *The Congress declares that it is the goal of the United States to eliminate the dumping of dredged materials containing contaminants in excess of marine water or sediment standards established pursuant to section 303 of the Federal Water Pollution Control Act into ocean waters.*

\* \* \* \* \*

## § 1402. Definitions

For the purposes of this Act the term—

(a) \* \* \*

(b) "Ocean waters" means those waters of the open seas lying seaward of the base line from which the territorial sea is measured, as provided for in the Convention on the Territorial Sea and the Contiguous Zone (15 UST 1606; TIAS 5639) and, solely for the purposes of title I of this Act, marine waters as defined pursuant to 33 U.S.C. 1362(24).

\* \* \* \* \*

## § 1412. Dumping permit program

(a) ENVIRONMENTAL PROTECTION AGENCY PERMITS.—Except in relation to dredged material, as provided for in section 103 of this title [33 USCS § 1413], and in relation to radiological, chemical, and biological warfare agents and high-level radioactive waste, for which no permit may be issued, the Administrator may issue permits, after notice and opportunity for public hearings, for the transportation from the United States or, in the case of an agency or instrumentality of the United States or in the case of a vessel or aircraft registered in the United States or flying the United States flag, for the transportation from a location outside the United States, of material for the purpose of dumping it into ocean waters, or for the dumping of material into the waters described in section 101(b) [33 USCS § 1411(b)], where the Administrator determines that such dumping will not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. The Administrator shall establish and apply criteria for reviewing and evaluating such permit applications, and, in establishing or revising such criteria,

shall consider, but not be limited in his consideration to, the following:

- (A) The need for the proposed dumping.
- (B) The effect of such dumping on human health and welfare, including economic, esthetic, and recreational values.
- (C) The effect of such dumping on fisheries resources, plankton, fish, shellfish, wildlife, shorelines and beaches.
- (D) The effect of such dumping on marine ecosystems, particularly with respect to—
  - (i) the transfer, concentration, and dispersion of such material and its byproducts through biological, physical, and chemical processes,
  - (ii) potential changes in marine ecosystem diversity, productivity, and stability, and
  - (iii) species and community population dynamics.
- (E) The persistence and permanence of the effects of the dumping.
- (F) The effect of dumping particular volumes and concentrations of such materials.
- (G) Appropriate locations and methods of disposal or recycling, including land-based alternatives and the probable impact of requiring use of such alternate locations or methods upon considerations affecting the public interest.
- (H) The effect on alternate uses of oceans, such as scientific study, fishing, and other living resource exploitation, and non-living resource exploitation.
- (I) In designating recommended sites, the Administrator shall utilize wherever feasible locations beyond the edge of the Continental Shelf.

In establishing or revising such criteria, the Administrator shall consult with Federal, State, and local officials, and interested members of the general public, as may appear appropriate to the Administrator. With respect to such criteria as may affect the civil works program of the Department of the Army, the Administrator shall also consult with the Secretary. In reviewing applications for permits, the Administrator shall make such provision for consultation with interested Federal and State agencies as he deems useful or necessary. **[No permit shall be issued for a dumping of material which will violate applicable water quality standards.]** *No permit or dumping authorization pursuant to section 103(e) shall be issued for a dumping of material which, in the case of a dump site located in the territorial sea, contains contaminants in excess of water quality or sediment quality standards adopted pursuant to the Federal Water Pollution Control Act or, in the case of any other dump site, contains contaminants in excess of water quality or sediment quality criteria published pursuant to the Federal Water Pollution Control Act.* To the extent that he may do so without relaxing the requirements of this title [33 USCS §§ 1411 et seq.], the Administrator, in establishing or revising such criteria, shall apply the standards and criteria binding upon the United States under the Convention, including its Annexes.

\* \* \* \* \*



**[(C) SITES AND TIMES FOR DUMPING.—**The Administrator may, considering the criteria established pursuant to subsection (a) of this section, designate recommended sites or times for dumping and, when he finds it necessary to protect critical areas, shall, after consultation with the Secretary, also designate sites or times within which certain materials may not be dumped.]

*(c)(1) The Administrator shall, consistent with the criteria established pursuant to subsection (a) of this section, designate sites or times for dumping. The Administrator shall designate sites or times for dumping which will mitigate adverse impacts on the environment to the fullest extent practicable.*

*(2) The Administrator shall, when he finds it necessary to protect critical areas, designate sites or times within which certain materials may not be dumped, including dumping pursuant to subsection (e) of section 103 of this title.*

*(3) The Administrator, in consultation with the Secretary, shall develop and implement a site management plan for each site designated pursuant to this section. Such plan shall include—*

*(A) a baseline assessment of environmental conditions at the site;*

*(B) special management conditions or practices to be implemented at each site necessary for the protection of the environment;*

*(C) a program of monitoring for each site including:*

*(i) water quality at the site and in the area of the site;*

*(ii) sediment quality at the site and in the area of the site;*

*(iii) the diversity, productivity, and stability of aquatic organisms at the site and in the area of the site; and*

*(iv) such other conditions as the Administrator deems appropriate.*

*(D) the anticipated use and management of the site over the following twenty-year period including the expected termination of dumping at the site, the anticipated need for site management, including pollution control, following the termination of the use of the site.*

*(E) a schedule for review and revision of the plan which shall not be less frequent than five years after adoption of the plan and every years thereafter; and*

*(F) such other requirements and conditions as the Administrator deems necessary.*

*(4) After the date of enactment of this paragraph, no site shall receive final designation unless a management plan has been developed pursuant to this section. Beginning three years after the date of enactment of this paragraph, no permit for dumping pursuant to this Act or dumping authorization pursuant to section 103(e) of this Act shall be issued for a site designated pursuant to this Act unless a site management plan has been adopted for such site.*

*(5) The Administrator shall develop site management plans for sites designated prior to the date of enactment of this paragraph as expeditiously as practicable, giving consideration to development plans for designated sites anticipated to have the greatest impact on the environment.*

(6) *The Administrator shall provide for public review and comment on site designation actions, Including the development and periodic review of management plans pursuant to paragraph (3) of this subsection, and shall hold a public hearing on the proposed designation or management plan development or revision or redesignation in the region of the country in which the site is located.*

\* \* \* \* \*

#### § 1413. Dumping permit program for dredged material

(a) **ISSUANCE BY SECRETARY OF THE ARMY.**—\* \* \*

(b) **INDEPENDENT DETERMINATION OF NEED FOR DUMPING, OTHER METHODS OF DISPOSAL, AND APPROPRIATE LOCATIONS.**—In making the determination required by subsection (a), the Secretary shall apply those criteria, established pursuant to section 102(a) [33 USCS § 1412(a)], relating to the effects of the dumping. Based upon an evaluation of the potential effect of a permit denial on navigation, economic and industrial development, and foreign and domestic commerce of the United States, the Secretary shall make an independent determination as to the need for the dumping. The Secretary shall also make an independent determination as to other possible methods of disposal and as to appropriate locations for the dumping. In considering appropriate locations, he shall [ , to the extent feasible, utilize the recommended ] *use* sites designated by the Administrator pursuant to section 102(c) [33 USCS § 1412(c)].

(c) **DISAGREEMENT OF ADMINISTRATOR WITH DETERMINATION OF THE SECRETARY OF THE ARMY.**—Prior to issuing any permit under this section, the Secretary shall first notify the Administrator of his intention to do so. In any case in which the Administrator disagrees with the determination of the Secretary as to compliance with the criteria *or restrictions* established pursuant to section 102(a) [33 USCS § 1412(a)] relating to the effects of the dumping or with the restrictions established pursuant to section 102(c) [33 USCS § 1412(c)] relating to critical areas *and site management plans*, the determination of the Administrator shall prevail. Unless the Administrator grants a waiver pursuant to subsection (d), the Secretary shall not issue a permit which does not comply with such criteria and with such restrictions.

(d) **[WAIVER OF REQUIREMENTS.—] SPECIAL PERMIT.**—If, in any case, the Secretary finds that, in the disposition of dredged material, there is no economically feasible method or site available other than a dumping site the utilization of which would result in non-compliance with the criteria *or restrictions* established pursuant to section 102(a) [33 USCS § 1412(a)] relating to the effects of dumping or with the restrictions established pursuant to section 102(c) [33 USCS § 1412(c)] relating to critical areas *and site management plans*, he shall so certify and request a [waiver from the Administrator of the specific requirements involved.] *special permit from the Administrator*. Within [thirty days] *ninety days* of the receipt of the [waiver] *special permit* request, unless the Administrator finds that the dumping of the material will result in an unacceptably adverse impact on municipal water supplies, shellfish beds,

wildlife, fisheries (including spawning and breeding areas), or recreational areas, he shall grant the [waiver.] *special permit*.

\* \* \* \* \*

#### § 1414. Permit conditions

(a) DESIGNATED AND INCLUDED CONDITIONS.—Permits issued under this title [33 USCS §§ 1411 et seq.] shall designate and include (1) the type of material authorized to be transported for dumping or to be dumped; (2) the amount of material authorized to be transported for dumping or to be dumped; (3) the location where such transport for dumping will be terminated or where such dumping will occur; [(4) the length of time for which the permits are valid and their expiration date;] (4) *such requirements, limitations, or conditions as are necessary to assure consistency with any site management plan approved pursuant to section 102(c) of this title*; (5) any special provisions deemed necessary by the Administrator or the Secretary, as the case may be, after consultation with the Secretary of the Department in which the Coast Guard is operating, for the monitoring and surveillance of the transportation of dumping; [and] (6) *special provisions which in the judgment of the Administrator or the Secretary, after consultation with State and local water pollution control authorities, are reasonable and necessary to control and prevent pollution of waters and sediment in the area of the dredging project from on-shore and related facilities subject to the control of the entity seeking a permit*; and (7) such other matters as the Administrator or the Secretary, as the case may be, deems appropriate. *Permits issued under this title shall be for a period not to exceed three years.*

\* \* \* \* \*

#### § 1415. Penalties

(a) ASSESSMENT OF CIVIL PENALTY BY ADMINISTRATOR; REMISSION OR MITIGATION; COURT ACTION FOR APPROPRIATE RELIEF.—\* \* \*

(b) CRIMINAL PENALTIES.—[In addition to any action which may be brought under subsection (a) of this section, a person knowingly violates this title [33 USCS §§ 1411 et seq.], regulations promulgated under this title [33 USCS §§ 1411 et seq.], or a permit issued under this title [33 USCS §§ 1411 et seq.] shall be fined not more than \$50,000, or imprisoned for not more than one year, or both.] (1) *who knowingly violates this title, regulations promulgated under this title, or a permit issued under this title, shall be fined under title 18, United States Code, or imprisoned for not more than five years, or both; and*

(2) *who is convicted of such a violation pursuant to paragraph (1) of this subsection, shall forfeit to the United States any property constituting or derived from any proceeds the person obtained, directly or indirectly, as a result of such violation, and any of the property of the person which was used, or intended to be used in any manner or part, to commit or to facilitate the commission of the violation*

\* \* \* \* \*

## § 1416. Relationship to other laws

### (a) VOIDING OF PREEXISTING LICENSES. \* \* \*

\* \* \* \* \*

[(d) **CONSISTENT STATE PROGRAMS.**—After the effective date of this title, no State shall adopt or enforce any rule or regulation relating to any activity regulated by this title [33 USCS §§ 1411 et seq.]. Any State may, however, propose to the Administrator criteria relating to the dumping of materials into ocean waters within its jurisdiction, or into other ocean waters to the extent that such dumping may effect waters within the jurisdiction of such State, and if the Administrator determines, after notice and opportunity for hearing, that the proposed criteria are not inconsistent with the purposes of this title [33 USCS §§ 1411 et seq.], may adopt those criteria and may issue regulations to implement such criteria. Such determination shall be made by the Administrator within one hundred and twenty days of receipt of the proposed criteria. For the purposes of this subsection, the term "State" means any State, interstate or regional authority, Federal territory of Commonwealth or the District of Columbia.]

*(d) STATE PROGRAMS.—(1) Any State may adopt criteria, rules or regulations relating to dumping of materials into ocean waters within its jurisdiction, only if such criteria, rules or regulations are more stringent and protective of such waters and sediment than the criteria, rules, or regulations adopted pursuant to this Act.*

*(2) Any criteria, rules, or regulations adopted pursuant to paragraph (1) of this subsection shall be transmitted to the Administrator and to the Secretary and, upon receipt, the Administrator and the Secretary shall assure compliance with such criteria, rules, and regulations.*

\* \* \* \* \*

(f) **DUMPING OF DREDGED MATERIAL IN LONG ISLAND SOUND FROM ANY FEDERAL, ETC., PROJECT.**—In addition to other provisions of law and notwithstanding the specific exclusion relating to dredged material in the first sentence in section 102(a) of this Act [33 USCS § 1412(a)], the dumping of dredged material in Long Island Sound from any Federal project (or pursuant to Federal authorization) or from a dredging project by a non-Federal applicant exceeding 25,000 cubic yards shall comply with [the criteria established pursuant to the second sentence of section 102(a) of the Act [33 USCS § 1412(a)] relating to the effects of dumping. Subsection (d) of this section shall not apply to this subsection.] *the requirements of this title.*

## TITLE IV—REGIONAL MARINE RESEARCH PROGRAM

### PURPOSE

SEC. 401. *The purposes of this title are to—*

*(a) establish regional marine research programs to protect the Nation's marine environment;*

*(b) provide sufficient and sustained funding for regional research programs to develop comprehensive, long-range research*

plans, and coordinate and support marine research and related activities;

(c) establish within the Federal Government the capability to provide effective oversight of regional marine research; and

(d) provide for periodic, comprehensive reports to Congress concerning conditions, trends, research needs, and response programs in the Nation's marine environment.

#### DEFINITIONS

SEC. 402. For purposes of this title—

(a) the term "Oversight Board" means the Regional Marine Research Oversight Board established pursuant to section 407 of this title;

(b) the term "region" means a marine research region designated in section 403(f) of this title;

(c) the term "Federal agency" means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation;

(d) the term "State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands;

(e) the term "marine waters" shall have the same meaning as established in section 502(24) of the Federal Water Pollution Control Act (33 U.S.C. 1362(24));

(f) the term "local government" means any city, town, borough, county, parish, district, or other public body which is a political subdivision of a State and which is created pursuant to State law;

(g) the term "nonprofit organization" means any organization, association, or institution described in section 501(c)(3) of the Internal Revenue Code of 1954 which is exempt from taxation pursuant to the provisions of section 501(a) of such Code; and

(h) the term "Great Lakes" has the meaning established in subparagraph 118(a)(3)(B) of the Federal Water Pollution Control Act (33 U.S.C. 1268(a)(3)(B)).

#### REGIONAL MARINE RESEARCH PROGRAMS

SEC. 403. (a) **GENERAL AUTHORITY.**—There is authorized to be established within each region, as defined under subsection (f) of this section, a regional marine research program.

(b) **PURPOSES.**—Regional marine research programs established pursuant to this section are intended to—

(1) set overall goals for an integrated, long-term program of research and monitoring of marine environmental quality in the region;

(2) develop comprehensive, long-range plans which identify the specific needs and priorities of research and monitoring activities and projects;

(3) assure coordination of research among State agencies and other organizations involved in marine research in the region;



(4) monitor environmental quality conditions of marine waters and assess the impacts of proposed activities in these waters;

(5) provide for participation in the research program by affected users and interest groups, such as commercial fishermen, other marine industries, and environmental organizations; and

(6) provide a forum for coordinating research among research institutions, with other regions, and with neighboring countries;

(7) make public reports on the environmental quality conditions in the marine region;

(8) analyze and interpret research data and information produced pursuant to the plans required by this title at the request of the relevant State and local agencies in the region for their application in environmental protection programs; and

(9) make such scientific recommendations to local, and Federal agencies on design of effective program to address identified problems as may be necessary.

(c) **AUTHORITIES.**—Each regional marine research program shall be authorized to—

(1) support basic and applied research, investigations, monitoring, and assessment activities of the marine environment of the region;

(2) cooperate with Federal agencies, with States and with local government entities, interstate and regional agencies, other public agencies and authorities, nonprofit institutions and organizations, or other persons, in the preparation and support of marine research in the region;

(3) enter into contracts, cooperative agreements or grants with member organizations, and with other State and local governmental entities, other public agencies or institutions, and nonprofit institutions and organizations for purposes of carrying out the provisions of this title;

(4) collect and make available the results of, and other information pertaining to, the research conducted in the region;

(5) support development of effective and practical methods and techniques for the detection and assessment of contamination in the marine environment;

(6) hire staff to carry out the provisions of this title;

(7) utilize facilities and personnel of existing Federal agencies, including scientific laboratories and research facilities;

(8) accept, and for all general purposes of this title, utilize funds from other sources, including but not limited to State and local funds, university funds, and donations; and

(9) accept donations of equipment if such equipment benefits regional marine research programs, with appropriate tax deductions available.

(d) **AREAS OF INVESTIGATION.**—In carrying out the purposes and authorities of this section, regional research programs may support or assist research, investigations, studies, surveys, or demonstrations with respect to, but not limited to—

(1) assessment of marine environmental quality, including chemical, physical, and biological indicators of environmental quality;

(2) effects or potential effects of contaminants, including nutrients, toxic chemicals and heavy metals, on the environment, including marine organisms;

(3) effects of modification of habitats, including coastal wetlands, seagrass beds and reefs, on the marine environment;

(4) inventory of pollutant sources and pollutant discharges into the marine environment;

(5) transport, dispersion, transformation, and fate and effect of contaminants in the marine environment;

(6) methods and techniques for modeling environmental quality conditions and trends including sampling of water, sediment, marine and aquatic organisms, and demonstration of such methods and techniques;

(7) the effects on human health and the environment of contaminants or combinations of contaminants at various levels, whether natural or anthropogenic, that are found in the environment;

(8) assessment of potential effects of major coastal and offshore projects in the region;

(9) assessment and monitoring of the effects of climate change on marine resources in the region; and

(10) analysis and interpretation of research data for the benefit of State and local environmental protection and resource management agencies in the region.

(e) CREATION OF REGIONAL PROGRAMS.—(1) The Governors of a majority of the States in a region, as defined in subsection (f), may submit for approval to the Oversight Board a combined, interstate proposal for a regional marine research program.

(2) Proposals for establishment of a regional marine research program shall—

(A) identify the goals and objectives of the program;

(B) identify the organizational structure and operating procedures of the program;

(C) identify the research organizations within the region that will participate in the program;

(D) identify the research capabilities and experience of the participation institutions and organizations and how such capabilities and experience will be coordinated and maintained;

(E) provide for a Board of Directors, to oversee the administration and management of the regional research program; and

(F) provide for a Research Advisory Group, to include representatives from affected user and interest groups, including the commercial and recreational fishing industry, other marine industries, and environmental organizations, to advise the Board of Directors in the conduct of authorized activities.

(3) Within ninety days of receipt of a proposal, the Oversight Board shall hold a public hearing in the region to hear comments on the proposal.

(4) Within one hundred and eighty days after receipt of a proposal, the Oversight Board shall approve or disapprove the proposal on consideration of the following criteria—

(A) inclusion as participating members of the program or other provision or mechanism for full coordination and cooperation with appropriate State agencies, marine research organiza-

tions or institutions, relevant national laboratories, and universities with marine programs in the region;

(B) demonstrated capability in sufficient disciplines to successfully mount a multidisciplinary research program;

(C) sufficient resources, including laboratory, library, computer, and support facilities;

(D) a commitment from the participating organizations and institutions to the support and participate in the regional marine research program; and

(E) establishment of an Advisory Group pursuant to paragraph (2)(F), and commitment to adequate procedures for effective consultation with such group.

(5) In the case of disapproval of a proposal, the Oversight Board shall notify the Governors of the submitting States in writing, stating in detail the revisions or modifications necessary to obtain approval of the proposal. The Governors of the submitting States may, not later than ninety days following such notification, submit such revisions and modifications as they deem appropriate. The Oversight Board shall approve or disapprove the revised proposal within ninety days of receipt.

(f) **MARINE RESEARCH REGIONS.**—For purposes of this title, marine research regions are defined as follows:

(1) Gulf of Maine region, comprised of the marine waters off the States of Maine, New Hampshire, and Massachusetts (north of Cape Cod);

(2) greater New York bight region, from south of Cape Code to Cape May, comprised of the marine waters off the States of Massachusetts, Rhode Island, Connecticut, New York, and New Jersey;

(3) mid-Atlantic region, from Cape Cod May, New Jersey, to Cape Lookout, comprised of the marine waters off the States of New Jersey, Delaware, Maryland, Virginia, and North Carolina;

(4) South Atlantic bight region, from Cape Lookout to the Florida Keys, comprised of the marine waters off the States of North Carolina, South Carolina, Georgia, and Florida (Atlantic coast);

(5) tropical region, comprised of the marine waters off Puerto Rico and the United States Virgin Islands ( and to provide for broader international research coordination, representatives from the nations of the Caribbean region may serve as ex officio members of the program of this region);

(6) Gulf of Mexico region, comprised of the marine waters off the States of Florida (gulf coast), Alabama, Mississippi, Louisiana, and Texas;

(7) California region, comprised of the marine waters off the State of California from Point Reyes south;

(8) North Pacific region, from Point Reyes to the Canadian border, comprised of the marine waters off the States of California, Oregon, and Washington;

(9) Gulf of Alaska, Bering and Arctic Seas region, comprised of the marine waters off the State of Alaska; and

(10) insular Pacific region, comprised of the marine waters off the State of Hawaii, Guam, American Samoa, and the Northern Mariana Islands.

(g) **GREAT LAKES RESEARCH OFFICE.**—The Great Lakes Research Office authorized under section 118(d) of the Federal Water Pollution Control Act (33 U.S.C. 1268(d)) shall be responsible for research in the Great Lakes region, shall operate solely pursuant to section 118(d), and shall be considered the Great Lakes counterpart to the research programs established by this title.

#### REGIONAL RESEARCH PLANS

**SEC. 404. (a) REGIONAL RESEARCH PLANS.**—Each regional marine research program, approved under section 403, shall develop a three-year marine research and assessment plan for the region.

(b) **CONTENTS OF PLAN.**—Such regional marine research plan shall include—

(1) a description of the research and assessment needs, goals, and priorities in the region over the up-coming ten-year period with emphasis on the upcoming three-to-five year period;

(2) a comprehensive inventory and description of all federally funded marine research and assessment activities expected to be conducted in the region during the three-year term of the research plan;

(3) an inventory and description of other research and assessment projects expected to be funded by public and private research organizations in the region;

(4) a general description of research and assessment projects, to be given priority for funding under section 405 of this Act in the three-year period covered by the plan, including the objectives of such projects and the approximate schedule, funding level, and products of such projects;

(5) to the extent practicable, review of research and assessment projects which are addressing issues common to neighboring regions and discussion of coordination of these projects; and

(6) an inventory of supplies and equipment used commonly for research projects in the region.

(c) **PLAN REVIEW AND APPROVAL.**—(1) The research plan shall be submitted by the Board of Directors of the regional program to the Oversight Board for review and approval.

(2) The Research Advisory Group shall have an opportunity to review and comment on the research plan.

(3) In review of research plans, the Oversight Board shall consider the degree to which the plan addresses the elements identified in subsection (b) of this section, any comments of the Research Advisory Group, and the past performance of the regional program in implementation of previous plans.

(4) The Oversight Board shall approve or disapprove the research plan within one hundred and twenty days of receipt.

(5) In the case of disapproval of a research plan, the Oversight Board shall notify the Board of Directors in writing, stating in detail the revisions or modifications necessary to obtain approval of the plan. The Board of Directors shall, not later than ninety days after such notification, submit such revisions and modifications as

they deem appropriate. The Oversight Board shall approve or disapprove the revised plan within ninety days of receipt.

(d) **PLAN REVISION.**—The research plan shall be revised and updated to reflect changing conditions every three years and resubmitted to the Oversight Board for review and approval under this section.

#### RESEARCH, SUPPORT, AND EQUIPMENT GRANTS

**SEC. 405. (a) SUPPORT GRANTS.**—(1) A regional marine research program established pursuant to section 403, may submit to the Oversight Board an application for a support grant on an annual basis. The application may provide for funding of basic functions of the program.

(2) The application shall be for a period of a fiscal year and shall be in such form as may be required by the Oversight Board.

(3) The Oversight Board shall approve or disapprove an application pursuant to this subsection within ninety days of receipt.

(b) **RESEARCH GRANTS.**—(1) A regional marine research program for which a research plan has been approved pursuant to section 404 may submit to the Oversight Board an application for funding of research and assessment projects, in an amount to be specified by the Oversight Board and consistent with this title, to support implementation of the approved research plan on an annual basis.

(2) Organizations and agencies identified pursuant to section 403(e)(2)(C) may submit to the Board of Directors of the regional marine research program proposals for specific research and assessment projects.

(3) Proposals submitted pursuant to paragraph (2) shall be peer reviewed. Findings of the peer review shall be provided to the Board of Directors of the regional research program submitting proposal.

(4) Projects designed to extend beyond a one-year period shall include a full description of the entire project at the time of submittal and shall be reviewed pursuant to paragraph (3) subsequent to initial submittal only.

(5) The Oversight Board shall review grant applications submitted pursuant to this section and shall approve or disapprove the application within ninety days of receipt.

(c) **EQUIPMENT SUPPORT.**—(1) The Board of Directors of any research program with an approved research plan pursuant to section 404 of this Act may submit to the Board an application to purchase equipment necessary for the research provided for in the approved research plan and funded under subsection (b).

(2) In review and approval of applications under subsection (c), the Board shall establish that there is—

(A) a clearly demonstrated need for the equipment in the region to support identified research projects;

(B) adequate provision for maintenance and full utilization of the equipment, including loaning of equipment to organizations participating in another marine research center; and

(C) Not a lower cost option for leasing equipment.

(3) In review and approval of applications regarding vessels or support craft the Oversight Board shall consult with the Federal



*Fleet Coordinating Council and the University Oceanographic Laboratory System (UOLS).*

(4) *The Board of Directors of each program shall hold title to equipment purchased pursuant to this section, shall report annually to the Oversight Board on the status and disposition of any equipment funded under this subsection, and shall give notice of ninety days prior to any sale or other disposition of such equipment.*

(d) *REPORTING.*—Any regional marine research program that receives a grant under subsection (b) of this section shall report to the Oversight Board no later than eighteen months after award of the grant on activities pursuant to this subsection. Such report shall include narrative summaries and technical data in such form as the Oversight Board may require.

#### REGIONAL ASSESSMENT

SEC. 406. (a) *CONTENTS.*—(1) *Each regional program established pursuant to this title shall prepare a regional marine assessment report which shall—*

(A) *provide an overview of environmental quality in the region using information as is available;*

(B) *describe trends in natural resource and environmental quality conditions;*

(C) *summarize the findings and conclusions of projects of the research program and identify issues and research needs; and*

(D) *provide recommendations for improvements in the design or implementation of Federal, State, or local programs for the protection of environmental quality in the region.*

(2) *A draft of the regional marine assessment report shall be reviewed by the Research Advisory Group for their comments and input before final submission to the Oversight Board.*

(b) *PUBLIC REVIEW.*—The regional marine assessment report shall be made available to the public, as well as to local, State, and Federal regulatory and management agencies. The regional marine assessment report shall be submitted to the Governors of each State in the region.

(c) *SCHEDULE.*—To the extent practicable, the Oversight Board shall provide for reports beginning three years after the date of establishment of each regional program and every three years thereafter.

#### REGIONAL MARINE RESEARCH OVERSIGHT BOARD

SEC. 407. (a) *ESTABLISHMENT OF REGIONAL MARINE RESEARCH OVERSIGHT BOARD.*—(1) *There is authorized to be established a Regional Marine Research Oversight Board to oversee and coordinate the activities of the regional marine research programs authorized under this title.*

(2) *The members of the Oversight Board shall be representatives of the following Federal agencies and institutions designated by the senior administrative official of each agency or institution—*

(A) *the Environmental Protection Agency,*

(B) *the National Oceanic and Atmospheric Administration,*

(C) *the National Science Foundation,*

(D) *the United States Fish and Wildlife Service,*

- (E) the Minerals Management Service,
- (F) the United States Army Corps of Engineers,
- (G) the Department of Energy,
- (H) the United States Navy,
- (I) the United States Geological Survey.

(3) The representative of the Environmental Protection Agency shall serve as chair of the Board.

(b) **FUNCTIONS AND AUTHORITIES.**—(1) The Oversight Board shall be responsible for the following—

(A) review and approval of proposals for regional marine research programs in accordance with the provisions of section 403; and

(B) review and approval of the three-year research plans submitted by regional marine research programs, in accordance with section 404.

(2) The Oversight Board is authorized to hire support staff to carry out the provisions of this section including an Executive Director at the Senior Executive Service (SES) level.

(c) **REPORT TO CONGRESS.**—The Oversight Board shall make reports to Congress within three years of the date of enactment and every three years thereafter on the research and assessment activities and accomplishments of the regional marine research programs.

#### AUTHORIZATIONS

**SEC. 408.** (a)(1) For the purpose of carrying out the activities authorized by sections 403, 404, 405, 406, and 407 of this title there are authorized to be appropriated \$30,000,000 per year.

(2) Such funds shall be allocated as follows—

(A) for the costs of the Oversight Board established pursuant to section 407 of this title, except that not more than \$500,000 shall be available for such purposes for any fiscal year;

(B) for grants to support regional marine research programs pursuant to section 405(a) of this title, but only if such research program has submitted a proposal which has been approved pursuant to section 403 of this title and each grant under this paragraph is not in excess of \$500,000 per fiscal year;

(C) for grants to support implementation of the regional research plans developed pursuant to section 404 of this title, but only if a research plan has been approved pursuant to section 404(c) and the aggregate amounts of grants under paragraphs (B) and (C) of this subsection to any such program for any fiscal year do not exceed \$3,000,000, or \$1,500,000 in the case of the Tropical region defined by section 403(f)(5); and

(D) for grants for the purchase of equipment under section 405(c) of this Act, to the extent amounts appropriated are not allocated pursuant to paragraphs (A), (B), or (C).

(b) In the event that appropriated funds are not sufficient to make grants in the full amounts provided for in this section, the Oversight Board shall give first priority to grants pursuant to paragraph (A) of subsection (a)(2); shall give second priority to grants pursuant to paragraph (B) of subsection (a)(2); and shall make grants pursuant to paragraph (C) of subsection (a)(2) available on a pro rated basis.

## TITLE V—NATIONAL MARINE MONITORING PROGRAM

### PURPOSES

SEC. 501. *The purposes of this title are to—*

- (a) *establish a comprehensive national program for consistent monitoring of the Nation's marine ecosystems;*
- (b) *establish a system for reviewing and evaluating the scientific, analytical, and technological means that are available for monitoring the environmental quality of marine ecosystems;*
- (c) *establish methods for identifying uniform indicators of marine ecosystem quality; and,*
- (d) *provide for periodic, comprehensive reports to Congress concerning the quality of the Nation's marine ecosystems.*

### DEFINITIONS

SEC. 502. *For the purposes of this title—*

- (a) *the term "monitoring" means any activity which produces, through continuous or repetitious scientific sampling and observation, measurements of changes in environmental conditions or qualities;*
- (b) *the term "marine waters" shall have the same meaning as established in subsection 502(24) of the Federal Water Pollution Control Act (33 U.S.C. 1362(24));*
- (c) *the term "marine ecosystem" means a system of interacting biological, chemical, and physical components throughout the water column, sea surface, and benthic environment of marine waters.*

### COMPREHENSIVE MARINE MONITORING PROGRAM

SEC. 503. (a) **AUTHORITY.**—*The Administrator of the Environmental Protection Agency shall implement a program for the collection, assimilation, and analysis of scientific data designed to measure the environmental quality of the Nation's marine ecosystems pursuant to this section. The Administrator shall assure the coordination of the monitoring program with the activities of the National Oceanic and Atmospheric Administration to the maximum extent practicable. Such program shall be located at the Environmental Research Laboratory, Narragansett, Rhode Island.*

(b) **PROGRAM ELEMENTS.**—*The Comprehensive Marine Monitoring Program shall include, but is not limited to—*

- (1) *identification and analysis of the status of environmental quality in the Nation's marine ecosystems, including, but not limited to, assessment of:*

(A) *ambient water quality, including identification of violations of standards adopted pursuant to title III of the Federal Water Pollution Control Act (33 U.S.C. 1311 et seq.);*

(B) *benthic environmental quality, including analysis of sediment and identification of violations of standards adopted pursuant to title III of the Federal Water Pollution Control Act (33 U.S.C. 1311 et seq.); and*

(C) *health and quality of living resources;*

(2) identification of sources of environmental degradation affecting marine ecosystems;

(3) assessment of the impact of governmental programs and alternative management strategies and measures designed to abate or prevent the degradation of marine ecosystems;

(4) assessment of the accumulation of floatables along marine shorelines, including the costs of clean up of floatables; and

(5) analysis of expected trends in the environmental quality of the Nation's marine ecosystem over the short- and long-term.

(c) **UNIFORM INDICATORS OF ECOSYSTEM QUALITY.**—The Administrator of the Environmental Protection Agency shall establish a program for the identification of indicators of marine ecosystem quality. The program shall include the identification of appropriate physical, chemical, and biological indicators of ecosystem health or stress, including, but not limited to:

(1) indicators of biological responses to contaminants within marine ecosystems; and

(2) indicators of the effects of pollutants on reproductive success at the population level.

(d) **MONITORING METHODS REVIEW SYSTEM.**—(1) The Administrator of the Environmental Protection Agency shall establish a system for designing, reviewing, and evaluating methods for monitoring marine ecosystems.

(2) The system shall include, but is not limited to:

(A) establishment and review of protocols for data collection and observation within the monitoring process, including protocols for assessment of floatables accumulation;

(B) review and guidance regarding proper methods for statistical analysis of monitoring data;

(C) evaluation of technological methods and materials used in the monitoring process; and,

(D) established of a quality control system to ensure that monitoring methods are used correctly and uniformly, and to protect the validity and comparability of monitoring data.

(3) Protocols pursuant to subparagraph (A) of paragraph (2) of this subsection shall be promulgated within two years of the date of enactment of this section. Within six months of the promulgation of such protocols, monitoring pursuant to this Act and the Federal Water Pollution Control Act shall be consistent with the protocols.

(e) **COMPREHENSIVE IMPLEMENTATION STRATEGY.**—(1) Within two years after the date of enactment of this title, the Administrator of the Environmental Protection Agency shall submit to Congress a Comprehensive Implementation Strategy identifying the current and planned activities to implement a comprehensive marine ecosystem monitoring program pursuant to this section.

(2) The Administrator shall consult with the Administrator of the National Oceanic and Atmospheric Administration, Director of the Fish and Wildlife Service, the Director of the Minerals Management Service, the secretary of the department in which the Coast Guard is operating, the Secretary of Agriculture, the administrator of any other relevant Federal agencies, and the States in developing the implementation strategy.

(3) Not less than one hundred and eighty days before submitting the Comprehensive Implementation Strategy to Congress, the Ad-

ministrator of the Environmental Protection Agency shall publish a draft version of the strategy in the Federal Register, and shall solicit public comments regarding such strategy.

(4) Within one year after submission of the strategy required under this subsection, the Administrator shall enter into Memoranda of Understanding with appropriate Federal agencies necessary to effect the coordination of Federal marine monitoring programs. The Memoranda of Understanding shall identify the monitoring and reporting responsibilities of each agency and shall encourage the coordination of monitoring activities where possible.

#### REPORT TO CONGRESS

SEC. 504. On September 30 of each year, the Administrator of the Environmental Protection Agency shall submit to Congress a report describing the condition of the Nation's marine ecosystems, including the following components:

- (1) an assessment of the status and health of the Nation's marine ecosystems;
- (2) an evaluation of environmental trends in marine ecosystems;
- (3) identification of sources of environmental degradation affecting marine ecosystems;
- (4) the extent to which floatables degrade marine ecosystems, trends in floatables accumulation, and the threat posed by floatables to marine life;
- (5) an assessment of the impact of government programs designed to abate the degradation of marine ecosystems; and
- (6) an evaluation of the adequacy of monitoring programs and identification of any additional program elements which may be needed.

#### INFORMATION TRANSFER

SEC. 505. (a) The Administrator of the Environmental Protection Agency shall establish a Marine Environmental Information Program to compile, analyze, and disseminate information on assessing marine degradation, on methods, practices and techniques effective in restoring and protecting marine ecosystems and on other issues related to the marine environment.

(b) The program required pursuant to this section shall—

- (1) distribute marine degradation analyses, assessments and technology and practices;
- (2) mount active outreach and education programs to the State and local governments and other appropriate agencies and organizations to improve progress to address marine environmental degradation;
- (3) make available to the public such information on marine environmental degradation as may be available; and
- (4) include an electronic information system for communication of monitoring information through national computer networks.



## AIR DEPOSITION RESEARCH AND MONITORING

**SEC. 506. (a) ATMOSPHERIC POLLUTANT.**—The Administrator of the Environmental Protection Agency shall establish and implement a program of research and monitoring to determine the effects of atmospheric pollutants, including nutrient and toxicant deposition, on degradation of the marine environment.

**(b) PROGRAM ELEMENTS.**—The program shall include—

(1) development of an atmospheric pollutant deposition measurement methodology;

(2) development and implementation of a marine atmospheric dry and wet deposition monitoring network; and

(3) research on—

(A) sources and deposition rates (including seasonal and temporal variations) of atmospheric pollutants;

(B) the fate and transport of atmospheric pollutants including the modeling of transport and deposition at a scale compatible with water quality modeling;

(C) the relative contribution of atmospheric pollutants to the total pollution loadings; and

(D) the biological and ecological effects of atmospheric pollutants.

**(c) REPORT.**—The Administrator of the Environmental Protection Agency shall submit a report to the Senate Committee on Environment and Public Works, the House Committee on Public Works and Transportation, and the House Committee on Merchant Marine and Fisheries describing their monitoring and research program within two years of enactment of this section and every two years thereafter.

## AUTHORIZATION

**SEC. 507.** There are authorized to be appropriated for the implementation of the programs authorized by this title not to exceed \$20,000,000 annually for fiscal years 1991, 1992, 1993, 1994, and 1995.

## WATER RESOURCES DEVELOPMENT ACT OF 1986

\* \* \* \* \*

**[SEC. 211. ALTERNATIVE TO MUD DUMP FOR DISPOSAL OF DREDGED MATERIAL.**

**[(a) DESIGNATION OF ALTERNATIVE SITES.**—Not later than three years after the date of enactment of this Act, the Administrator of the Environmental Protection Agency shall designate one or more site in accordance with the Marine Protection, Research, and Sanctuaries Act of 1972 for the disposal of dredged material which, without such designation, would be disposed of at the Mud Dump (as defined in subsection (g)). The designated site or sites shall be located not less than 20 miles from the shoreline. The Administrator, in determining sites for possible designation under this subsection, shall consult with the Secretary and appropriate Federal, State, interstate, and local agencies.

[(b) **USE OF NEWLY DESIGNATED SITE.**—Beginning on the 30th day following the date on which the Administrator of the Environmental Protection Agency makes the designation required by subsection (a) any ocean disposal of dredged material (other than acceptable dredged material) by any person or governmental entity authorized pursuant to the Marine Protection, Research, and Sanctuaries Act of 1972 to dispose of dredged material at the Mud Dump on or before the date of such designation shall take place at the newly designated ocean disposal site or sites under subsection (a) in lieu of the Mud Dump.

[(c) **INTERIM AVAILABILITY OF LAWFUL SITES.**—Until the 30th day following the date on which the Administrator of the Environmental Protection Agency makes the designation required by subsection (a), there shall be available a lawful site for the ocean disposal of dredged material by any person or governmental entity authorized pursuant to the Marine Protection, Research, and Sanctuaries Act of 1972 to dispose of dredged material at the Mud Dump on or before the date of such designation.

[(d) **STATUS REPORTS.**—Not later than one year after the date of enactment of this Act and annually thereafter until the designation of one or more sites under subsection (a), the Administrator of the Environmental Protection Agency shall submit a report to the Committee on Public Works and Transportation of the House of Representatives and the Committee on Environment and Public Works of the Senate describing the status of such designation.

[(e) **FUTURE USE OF MUD DUMP RESTRICTED TO ACCEPTABLE DREDGED MATERIAL.**—Notwithstanding any other provision of law, including any regulation, the Secretary shall ensure that, not later than the 30th day following the date on which the Administrator of the Environmental Protection Agency makes the designation required by subsection (a), all existing and future Department of the Army permits and authorizations for disposal of dredged material at the Mud Dump shall be modified, revoked, and issued (as appropriate) to ensure that only acceptable dredged material will be disposed of at such site and that all other dredged material determined to be suitable for ocean disposal will be disposed of at the site or sites designated pursuant to subsection (a) of this section.

[(f) **DEFINITION OF ACCEPTABLE DREDGED MATERIAL.**—For purposes of this section, the term "acceptable dredged material" means rock, beach quality sand, material excluded from testing under the ocean dumping regulations promulgated by the Administrator of the Environmental Protection Agency pursuant to the Marine Protection, Research, and Sanctuaries Act of 1972, and any other dredged material (including that from new work) determined by the Secretary, in consultation with the Administrator, to be substantially free of pollutants.

[(g) **DEFINITION OF MUD DUMP.**—For purposes of this section, the term "Mud Dump" means the area located approximately 5¾ miles east of Sandy Hook, New Jersey, with boundary coordinates of 40 degrees 23 minutes 48 seconds N, 73 degrees 51 minutes 28 seconds W; 40 degrees 21 minutes 48 seconds N, 73 degrees 50 minutes 00 seconds W; 40 degrees 21 minutes 48 seconds N, 73 degrees 51 minutes 28 seconds W; and 40 degrees 23 minutes 48 seconds N, 73 degrees 50 minutes 00 seconds W.]